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March 1969

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ATMOSPHERIC STRUCTURE

WHITE SANDS MISSILE RANGE, NEW MEXICO

PART 3

UPPER AIR DATA: JALLEN SITE

ATMOSPHERIC SCIENCES RESEARCH OFFICE
WHITE SANDS MISSILE RANGE, NEW MEXICO

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UNITED STATES ARMY ELECTRONICS COMMAND

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ATMOSPHERIC STRUCTURE
WHITE SANDS MISSILE RANGE, NEW MEXICO

PART 3

UPPER AIR DATA: JALLEN SITE

By

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DR-325

March 1969

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ATMOSPHERIC SCIENCES RESEARCH OFFICE
WHITE SANDS MISSILE RANGE, NEW MEXICO

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ATMOSPHERIC STRUCTURE

UPPER AIR DATA

JALLEN SITE

ABSTRACT

A statistical analysis of upper air data is presented for Jallen Site, White Sands Missile Range, New Mexico. Atmospheric parameters covered, for the layer 6,000 to 100,000 feet above mean sea level, are: wind, temperature, pressure, density, moisture, index of refraction, and freezing level. This climatological information is based on the period of observation from 1962-1967.

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INTRODUCTION

Activities of various projects on Range often necessitate a knowledge of upper air atmospheric conditions weeks or months in advance of the scheduled mission. As this exceeds the capability of the usual 24-56 hour forecast, or the longer five-day outlook, a statistical analysis of exoteric meteorological data is desirable. Missions at specific launch complexes frequently demand a detailed knowledge of conditions aloft for that particular area as opposed to data for the entire Range; for this reason an analysis will be presented for individual test sites.

This report presents the frequency of occurrence of the critical meteorological condition, mean and median values, and the extreme conditions classified by months and seasons, that can be expected from 6,000 to 100,000 feet above mean sea level (MSL) at Jallen Site, latitude $33^{\circ} 11'$ north, longitude $106^{\circ} 29'$ west, elevation 4,051 feet MST. The seven parameters so analyzed are wind, temperature, pressure, density, moisture, index of refraction, and freezing level. The statistical information is based on the observational period 1962-1967. Note should be made at this point that White Sands Missile Range (WSMR) radiosonde releases do not follow a routine schedule, but are taken at random depending upon the mission requirements for any given date (Table I).

Upper air data has been published for Holloman, Apache, White Sands Desert, Stallion, and Small Missile Range (Figure 1) (1,2,3, 4,5). Reports 1 and 2 in this series presented analyses of surface Range data for 'A' Station (6,7).

EXPLANATION OF TERMS

1. Winds Aloft

- A. Wind directions are given as the true direction from which the wind is blowing.
- B. Wind speeds are measured in knots (nautical miles per hour).

2. Standard Vector Deviation of the Wind (8)

The standard vector deviation of the wind is a measure of dispersion about the end of the mean resultant wind vector. A circle drawn with the center at the end of the mean resultant wind vector and a radius of the standard vector deviation includes 63 per cent of the vector winds.

$$\sigma^2 = \sum \frac{V^2}{N} - V_R^2$$

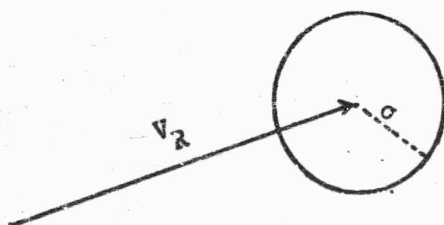
where,

σ = Standard vector deviation, knots

N = Number of cases

V_R = Speed of vector mean wind

V = Module of the vector wind



3. Constancy (8)

Constancy is a term used to show how constant the direction of the wind is. It is determined by dividing the mean scalar wind into the magnitude of the mean resultant wind.

$$Q = \frac{100 V_R}{V_S} \quad (\text{per cent})$$

EXPLANATION OF TERMS

3. Constancy (8)

where,

Q = Constancy of wind direction (per cent)

V_R = Module or speed of vector mean wind

V_S = Speed of scalar mean wind

The constancy of a set of winds is zero when they blow equally frequently from all directions, with the same average speed; the constancy is 100 when they blow from exactly the same direction, but not necessarily all with the same speed.

4. Density (9)

$$\rho_X = 348.43 \left[\frac{p}{K_{VX}} \right] \text{ grams/cubic meter}$$

$$K_{VX} = K \left[\frac{p}{p - 0.378e} \right]$$

$$e = 0.0611 f 10^{\left(\frac{7.5C}{C + 237.3} \right)}$$

where,

ρ_X = Density, in grams/cubic meter

p = Pressure, in millibars

K_{VX} = Virtual temperature, in degrees Kelvin

e = Partial pressure of aqueous vapor, in millibars

C = Temperature, in degrees Celsius

$K = C + 273.16$, Temperature, Absolute, in degrees Kelvin

f = Relative humidity, in per cent

5. Index of Refraction (9)

$$n_X = 1 + \frac{77.6}{K} \left[p + e \left(\frac{4830}{K} - \frac{11}{77.6} \right) \right] 10^{-6}$$

EXPLANATION OF TERMS

5. Index of Refraction (9)

$$e = 0.0611 f 10^{\left(\frac{7.5C}{C + 237.3} \right)}$$

where,

n_x = Index of refraction, dimensionless

$K = C + 273.16$, Temperature, Absolute, in degrees Kelvin

C = Temperature, in degrees Celsius

p = Pressure, in millibars

f = Relative humidity, in per cent

e = Partial pressure of aqueous vapor, in millibars

6. Mixing Ratio (10,11)

In a system of moist air, the dimensionless ratio of the mass of water vapor to the mass of dry air.

$$\omega = \frac{0.622e}{p - e} \times 10^3$$

where,

ω = Mixing ratio, grams/kilogram

p = Pressure, in millibars

e = Partial pressure of aqueous vapor, in millibars

$$e = re_s$$

where,

r = Relative humidity, in per cent

e_s = Saturation vapor pressure, in millibars

EXPLANATION OF TERMS

6. Mixing Ratio (10,11)

$$\log_{10} e_s = -7.90298 \left(\frac{T_s}{T} - 1 \right) + 5.02808 \log_{10} \left(\frac{T_s}{T} \right) - 7.3816 \times 10^{-7}$$

$$\left[10^{11.344 \left(1 - \frac{T}{T_s} \right) - 1} + 8.1328 \times 10^{-3} \left[10^{-3.49149 \left(\frac{T_s}{T} - 1 \right) - 1} + \log_{10} e_{w_s} \right] \right]$$

where,

T = Dry bulb temperature, in degrees Kelvin

T_s = Steam point temperature, 373.16 degrees Kelvin

e_{w_s} = Saturation pressure of pure ordinary liquid water at steam point temperature (T_s), 1013.246 millibars

7. Precipitable Water (10,11)

Precipitable water is defined as the total atmospheric water vapor contained in a vertical column of unit cross-sectional area extending between any two specified levels. It may be expressed as the height to which that water substance would stand if completely condensed and collected in a vessel of the same unit cross section.

Mathematically,

$$W = \frac{1}{g} \int_{p_1}^{p_2} \omega dp$$

where,

W = Precipitable water vapor, centimeters

ω = Mixing ratio, grams/kilogram

p = Pressure, bounded by p_1 and p_2 , millibars

g = Acceleration of gravity, centimeters per sec²

If g is expressed in cm sec⁻², p in millibars, and ω in g kg⁻¹, then W is in centimeters. With these units, the above equation may be written as:

$$W_{(cm)} = 0.001 \int_{p_1}^{p_2} \omega dp$$

EXPLANATION OF TERMS

7. Precipitable Water (10,11)

To determine the precipitable water within the various layers, the preceding equation will be numerically integrated. Since the mixing ratio, ω , may be expressed as

$$\omega = \frac{0.622e}{p - e}$$

it is seen that

$$W_{(cm)} = 0.622 \int_{p_1}^{p_2} \frac{e}{p - e} dp$$

where e and p are expressed in millibars. Note that a factor of 10^3 has been introduced to compensate for units.

ACCURACY OF DATA

The standard accuracies (1 σ) of the instrumentation are the derived data are as follows:

Parameter	Operating Range	Accuracy (Root Mean Square)
<u>TEMPERATURE</u>		
AN/GMD-1 (AMT-4, AMT-12)	Surface - 120,000 Feet	0.7° Celsius (from -90°C to +60°C)
AN/GMD-2 (AMQ-9)	Surface - 120,000 Feet	0.7° Celsius
<u>RELATIVE HUMIDITY</u>		
AN/GMD-1 (carbon element)	T > 0° Celsius	5 per cent
AN/GMD-2	0° ≥ T ≥ -40° Celsius	10 per cent
	T < -40° Celsius	Questionable
<u>PRESSURE</u> (computer processed)		
AN/GMD-1	10,000 Feet	0.7 Millibar
AN/GMD-2	20,000 Feet	1.0 Millibar
	30,000 Feet	1.2 Millibars
	40,000 Feet	1.0 Millibar
	50,000 Feet	0.7 Millibar
	60,000 Feet	0.55 Millibar
	70,000 Feet	0.40 Millibar
	80,000 Feet	0.30 Millibar
	90,000 Feet	0.20 Millibar
	100,000 Feet	0.12 Millibar
		hypso- meter equipped sonde for GMD-1

ACCURACY OF DATA

DENSITY

AN/GMD-1	10,000 Feet	0.3 Per cent
AN/GMD-2	20,000 Feet	0.3 Per cent
	30,000 Feet	0.4 Per cent
	40,000 Feet	0.5 Per cent
	50,000 Feet	0.6 Per cent
	60,000 Feet	0.7 Per cent
	70,000 Feet	0.8 Per cent
	80,000 Feet	0.9 Per cent
	90,000 Feet	1.0 Per cent
	100,000 Feet	1.2 Per cent

INDEX OF REFRACTION

AN/GMD-1; AN/GMD-2	5,000 Feet	2.6 Per cent
	15,000 Feet	1.7 Per cent
	25,000 Feet	0.9 Per cent
	30,000 Feet	0.5 Per cent

WIND

AN/GMD-1
AN/GMD-2 (considered to
be more reliable than
GMD-1 in mean wind
speeds > 50 knots)

If the magnitude of the
mean wind vector from the
surface to the level in
question is:

		<u>Knots</u>		
		<30	30-60	60-90
Note: Accuracies are averages over a 1 minute interval to 45,000 feet, 2 minute intervals at higher altitudes and 4 minutes for certain elevation angles.	20,000 Feet	3	7	15
	40,000 Feet	4	14	30
	60,000 Feet	The RMS (Vector) 6 in knots is:	21	45
	80,000 Feet		28	--
	100,000 Feet		35	--
	120,000 Feet		42	--

ACCURACY OF DATA

Manual and computer verification techniques were employed to insure the highest degree of accuracy of input data for this analysis.

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UPPER AIR WIND DATA

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B. By Seasons

1. Upper Air Wind Data at Selected Levels ----- 48
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Air Wind Directions at Selected Levels
(In Per Cent)----- 52
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Air Scalar Wind Speeds at Selected Levels
(In Per Cent) ----- 56

UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

JANUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	MEAN WIND COMPONENTS (KNOTS)			RESULTANT DIRECTION (DEGREES)	VECTOR MEAN SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDA VECTU DEVIAT (KNOT
				+N	-S	+E	-W				
6000.	118.	29.	0.	1.4		-4.7	286.	5.	10.	52.	10
8000.	117.	39.	3.	2.8		-10.4	285.	11.	16.	65.	15
10000.	117.	47.	2.	5.9		-14.7	292.	16.	22.	72.	18
12000.	116.	57.	3.	7.9		-17.6	294.	19.	26.	74.	21
14000.	116.	62.	2.	9.0		-20.4	294.	22.	30.	74.	24
15000.	116.	72.	3.	9.4		-21.6	294.	24.	32.	74.	26
16000.	116.	90.	4.	9.9		-23.0	293.	25.	34.	74.	27
18000.	116.	102.	5.	10.6		-25.5	293.	28.	38.	75.	31
20000.	115.	104.	2.	10.8		-27.2	292.	29.	41.	72.	34
25000.	115.	140.	5.	11.8		-32.6	290.	35.	50.	69.	43
30000.	109.	120.	2.	11.5		-36.6	287.	38.	55.	70.	47
35000.	103.	117.	12.	9.5		-44.8	282.	46.	60.	77.	47
40000.	102.	118.	4.	6.1		-49.7	277.	50.	60.	83.	42
45000.	95.	107.	7.	3.2		-50.4	274.	50.	57.	88.	35
50000.	84.	94.	15.	1.8		-50.5	272.	51.	55.	92.	29
55000.	69.	97.	6.	-0.8		-39.4	269.	39.	43.	93.	27
60000.	56.	83.	4.	2.2		-21.8	276.	22.	25.	88.	20
65000.	50.	49.	0.	1.6		-15.9	276.	16.	20.	80.	17
70000.	44.	39.	1.	3.8		-9.9	291.	11.	16.	67.	17
75000.	38.	47.	3.	2.9		-6.4	295.	7.	13.	52.	16
80000.	37.	73.	2.	3.0		-9.7	287.	10.	17.	61.	15
85000.	35.	75.	2.	2.9		-11.1	285.	11.	18.	64.	20
90000.	31.	86.	5.	0.7		-15.9	272.	16.	22.	72.	24
95000.	23.	72.	1.	-4.5		-21.0	258.	22.	28.	76.	29
100000.	15.	104.	6.	-8.9		-30.1	253.	31.	35.	89.	30

UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

FEBRUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	MEAN WIND COMPONENTS (KNOTS)			RESULTANT DIRECTION (DEGREES)	VECTOR MEAN SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIAT (KNOT)
				+N	-S	+E	-W				
6000.	112.	28.	0.	1.1		-3.3	289.	3.	9.	40.	10.
8000.	112.	42.	1.	2.3		-7.5	287.	8.	13.	59.	13.
10000.	111.	54.	2.	4.3		-11.7	290.	12.	17.	73.	15.
12000.	111.	60.	3.	6.4		-16.3	292.	18.	23.	77.	19.
14000.	111.	59.	3.	6.9		-20.7	288.	22.	28.	78.	22.
15000.	110.	76.	4.	7.6		-22.3	289.	24.	30.	78.	23.
16000.	111.	83.	5.	8.0		-23.6	289.	25.	32.	77.	25.
18000.	110.	70.	7.	8.6		-25.5	289.	27.	35.	76.	28.
20000.	110.	74.	7.	8.6		-28.2	287.	30.	40.	74.	31.
25000.	107.	113.	9.	8.1		-36.3	283.	37.	49.	76.	39.
30000.	105.	118.	5.	7.2		-44.0	279.	45.	58.	77.	44.
35000.	100.	128.	9.	9.3		-49.1	281.	50.	62.	81.	46.
40000.	93.	132.	5.	5.7		-54.3	276.	55.	62.	88.	39.
45000.	90.	118.	8.	2.9		-52.2	273.	52.	58.	90.	34.
50000.	75.	95.	9.	4.6		-46.9	276.	47.	52.	91.	27.
55000.	64.	83.	8.	3.7		-35.0	276.	35.	40.	88.	25.
60000.	58.	70.	5.	3.3		-22.6	278.	23.	26.	89.	19.
65000.	56.	78.	3.	1.9		-16.5	277.	17.	22.	76.	20.
70000.	54.	49.	5.	1.2		-9.6	277.	10.	17.	57.	17.
75000.	50.	45.	1.	0.3		-10.8	272.	11.	19.	57.	18.
80000.	47.	58.	4.	-2.4		-10.4	257.	11.	22.	49.	23.
85000.	43.	56.	3.	-3.0		-10.4	254.	11.	24.	45.	25.
90000.	38.	55.	4.	-2.2		-7.4	254.	8.	26.	30.	28.
95000.	30.	53.	3.	-2.1		-9.2	257.	9.	25.	37.	28.
100000.	25.	55.	3.	2.8		-6.4	293.	7.	30.	24.	33.

UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

MARCH

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	MEAN WIND COMPONENTS (KNOTS)			RESULTANT DIRECTION (DEGREES)	VECTOR MEAN SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
				+N	-S	+E	-W				
6000.	161.	30.	1.	-3.5		-2.9	219.	5.	9.	53.	9.
8000.	161.	33.	1.	-2.9		-7.2	248.	8.	12.	65.	11.
10000.	160.	46.	2.	-1.7		-11.8	262.	12.	16.	73.	14.
12000.	158.	52.	2.	-1.0		-16.3	266.	16.	21.	77.	18.
14000.	158.	60.	4.	-0.8		-20.8	268.	21.	23.	80.	21.
15000.	155.	64.	4.	-0.4		-22.5	269.	23.	28.	82.	21.
16000.	159.	78.	3.	-1.0		-24.1	268.	24.	30.	81.	23.
18000.	158.	90.	0.	-1.1		-26.7	268.	27.	33.	81.	25.
20000.	157.	99.	9.	-2.1		-30.1	266.	30.	37.	81.	28.
25000.	152.	110.	0.	-2.5		-37.7	266.	38.	47.	80.	37.
30000.	154.	134.	0.	-4.2		-47.3	265.	47.	59.	80.	46.
35000.	147.	160.	10.	-3.2		-56.1	267.	56.	68.	83.	50.
40000.	145.	170.	4.	-3.4		-58.6	267.	59.	66.	89.	42.
45000.	132.	156.	3.	-5.3		-55.6	265.	56.	59.	94.	32.
50000.	129.	116.	11.	-4.3		-51.0	265.	51.	54.	95.	26.
55000.	112.	105.	0.	-2.7		-40.1	266.	40.	43.	94.	23.
60000.	102.	96.	0.	-1.7		-25.5	266.	26.	30.	85.	24.
65000.	88.	83.	0.	-0.8		-19.6	268.	20.	23.	80.	21.
70000.	85.	78.	0.	-2.0		-11.0	260.	11.	16.	69.	17.
75000.	70.	73.	0.	-1.3		-13.4	265.	14.	18.	76.	17.
80000.	57.	73.	0.	-1.1		-17.1	266.	17.	20.	86.	19.
85000.	47.	62.	2.	-2.1		-17.6	263.	18.	20.	89.	15.
90000.	43.	63.	6.	-0.0		-22.7	270.	23.	25.	90.	17.
95000.	39.	86.	5.	-1.2		-25.7	267.	26.	28.	92.	18.
100000.	29.	115.	0.	-3.6		-34.2	264.	34.	37.	92.	26.

UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
JALAEH SITE (JAL)
PERIOD OF RECORD 1962-1967

APRIL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	MEAN WIND COMPONENTS (KNOTS)		RESULTANT DIRECTION (DEGREES)	VECTOR MEAN SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIAT (KNOT)
				+N	-S					
6000.	139.	31.	1.	-4.3	-3.5	220.	6.	11.	51.	12
8000.	137.	41.	2.	-4.2	-7.7	241.	9.	14.	63.	14
10000.	137.	54.	2.	-4.8	-12.9	249.	14.	19.	74.	16
12000.	137.	67.	2.	-5.6	-18.0	253.	19.	24.	79.	19
14000.	137.	69.	2.	-6.7	-22.7	253.	24.	29.	81.	22
15000.	136.	67.	3.	-7.1	-24.9	254.	26.	31.	82.	24
16000.	136.	72.	5.	-7.5	-21.2	255.	28.	34.	83.	25
18000.	137.	88.	4.	-7.6	-30.9	256.	32.	38.	84.	27
20000.	137.	97.	5.	-8.6	-33.6	256.	35.	41.	84.	29
25000.	136.	106.	3.	-11.6	-40.2	254.	42.	49.	85.	33
30000.	135.	126.	11.	-14.7	-48.3	253.	51.	59.	85.	40
35000.	129.	145.	14.	-16.0	-54.9	254.	57.	68.	84.	45
40000.	124.	149.	0.	-18.6	-55.6	252.	59.	67.	83.	41
45000.	115.	139.	0.	-18.1	-49.7	250.	53.	59.	90.	33
50000.	109.	94.	0.	-15.5	-46.0	251.	49.	52.	94.	26
55000.	101.	88.	0.	-11.2	-36.1	253.	38.	42.	91.	25
60000.	92.	57.	0.	-6.5	-17.1	249.	18.	22.	95.	16
65000.	84.	40.	2.	-2.3	-5.3	246.	6.	13.	44.	15
70000.	81.	51.	2.	-2.0	1.2	147.	2.	11.	21.	13
75000.	78.	41.	1.	-1.6	1.4	139.	2.	11.	20.	13
80000.	75.	46.	1.	-2.7	0.4	171.	3.	12.	24.	14
85000.	70.	38.	1.	-3.2	-3.8	229.	5.	11.	43.	12
90000.	65.	44.	0.	-3.0	-5.4	249.	6.	13.	48.	16
95000.	57.	44.	0.	-3.3	-9.1	250.	10.	14.	67.	14
100000.	41.	52.	0.	-5.7	-15.4	250.	16.	20.	81.	17

UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

MAY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	MEAN WIND COMPONENTS (KNOTS)		RESULTANT DIRECTION (DEGREES)		VECTOR MEAN SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOT)
				+N	-S	+E	-W				
6000.	128.	32.	0.	-3.6		-2.0		4.	9.	46.	10.
8000.	126.	37.	1.	-4.6		-5.4		7.	11.	65.	10.
10000.	125.	36.	1.	-4.5		-8.8		10.	13.	75.	11.
12000.	124.	52.	1.	-5.5		-12.0		13.	17.	78.	14.
14000.	124.	69.	3.	-7.0		-15.1		17.	21.	78.	18.
15000.	121.	73.	2.	-7.8		-16.8		19.	23.	79.	20.
16000.	121.	72.	1.	-8.4		-18.4		20.	25.	81.	20.
18000.	120.	81.	1.	-9.0		-22.1		24.	28.	85.	21.
20000.	120.	92.	2.	-8.4		-25.1		26.	31.	87.	23.
25000.	119.	109.	4.	-8.7		-31.3		32.	37.	88.	28.
30000.	121.	131.	0.	-10.2		-36.1		38.	42.	89.	31.
35000.	114.	132.	4.	-9.5		-44.9		46.	51.	90.	34.
40000.	115.	146.	0.	-7.7		-50.5		51.	55.	93.	35.
45000.	103.	109.	0.	-7.7		-66.5		47.	50.	95.	28.
50000.	100.	103.	13.	-6.9		-39.5		49.	42.	54.	23.
55000.	98.	67.	0.	-3.6		-21.5		22.	25.	89.	18.
60000.	94.	55.	1.	-1.8		-8.7		9.	13.	87.	13.
65000.	91.	35.	0.	0.9		-1.1		1.	8.	17.	10.
70000.	90.	40.	0.	-0.4		4.2		4.	5.	48.	14.
75000.	81.	41.	2.	-0.0		5.3		5.	10.	54.	10.
80000.	78.	52.	0.	-1.7		5.0		5.	10.	51.	11.
85000.	73.	30.	2.	-1.3		5.4		6.	11.	54.	11.
90000.	71.	44.	0.	-1.1		1.5		2.	12.	15.	14.
95000.	64.	34.	0.	-2.2		1.1		2.	11.	22.	13.
100000.	51.	27.	0.	-1.7		-0.3		2.	12.	14.	14.

UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

JUNE

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	MEAN WIND COMPONENTS (KNOTS)		RESULTANT DIRECTION (DEGREES)	VECTOR MEAN SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIAT (KNOT)
				+N	-S					
6000	127	31	0	-5.7	-2.3	202	6	9	67	9
3000	127	35	1	-6.8	-5.2	218	9	11	75	10
10000	127	39	1	-6.7	-7.5	228	10	13	77	11
12000	128	39	1	-7.0	-9.2	253	12	15	76	13
14000	127	45	2	-8.1	-9.9	231	13	18	72	14
15000	126	49	1	-9.0	-10.3	223	14	19	73	17
16000	126	49	1	-9.3	-11.6	231	15	20	75	18
18000	125	56	1	-9.6	-13.6	235	17	22	76	19
20000	125	61	2	-9.4	-15.9	239	18	23	79	20
25000	124	71	3	-8.3	-19.9	247	22	27	81	21
30000	120	80	1	-10.0	-26.2	249	28	33	85	24
35000	114	93	7	-12.2	-33.9	250	35	42	86	29
40000	115	116	0	-10.3	-41.6	256	43	49	88	32
45000	112	106	4	-10.4	-40.1	255	41	46	89	28
50000	105	70	5	-9.5	-28.4	252	30	34	89	21
55000	99	56	3	-6.2	-10.5	240	12	17	76	17
60000	97	30	2	-4.4	4.8	133	6	12	53	12
65000	95	23	0	-2.9	10.3	106	11	13	85	9
70000	92	41	0	-1.0	13.0	95	13	15	90	9
75000	89	39	4	-0.8	17.7	92	18	18	97	9
80000	79	43	3	-2.9	18.7	99	19	20	97	8
85000	74	36	0	-1.1	18.7	93	18	20	93	11
90000	66	39	4	-1.0	21.2	93	21	22	96	11
95000	59	42	8	-1.4	23.2	93	23	24	96	12
100000	54	47	0	-3.3	26.0	97	26	27	98	12

UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

JULY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	MEAN WIND COMPONENTS (KNOTS)			RESULTANT DIRECTION (DEGREES)	VECTOR MEAN SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIAT (KNOTS)
				+N	-S	+E	-W				
6000.	149.	21.	0.	-2.1		0.6	164.	2.	5.	36.	7.
8000.	149.	26.	0.	-2.8		-0.6	192.	3.	7.	41.	8.
10000.	149.	19.	0.	-2.2		-0.4	190.	2.	7.	32.	8.
12000.	149.	22.	0.	-1.9		1.2	147.	2.	8.	28.	9.
14000.	149.	29.	1.	-2.0		2.5	129.	3.	9.	34.	10.
15000.	141.	29.	1.	-2.3		3.1	126.	5.	10.	39.	10.
16000.	149.	26.	0.	-2.3		3.5	123.	4.	10.	42.	10.
18000.	148.	28.	1.	-2.4		3.6	124.	4.	10.	44.	10.
20000.	147.	31.	2.	-3.7		2.7	144.	5.	10.	45.	11.
25000.	139.	32.	1.	-5.5		1.8	161.	6.	12.	48.	13.
30000.	145.	37.	1.	-6.5		2.0	163.	7.	14.	48.	15.
35000.	133.	43.	2.	-8.0		1.8	167.	8.	17.	48.	17.
40000.	137.	44.	2.	-7.6		2.5	162.	8.	18.	44.	19.
45000.	121.	49.	1.	-6.7		3.0	156.	7.	18.	41.	20.
50000.	118.	46.	1.	-5.5		5.4	135.	8.	17.	46.	17.
55000.	104.	35.	3.	-5.5		9.0	121.	11.	13.	79.	10.
60000.	102.	32.	2.	-3.1		13.4	103.	14.	15.	90.	9.
65000.	91.	34.	6.	-2.1		17.9	97.	18.	19.	84.	9.
70000.	89.	37.	8.	-1.4		21.2	94.	21.	22.	98.	7.
75000.	81.	42.	11.	-0.7		24.6	92.	25.	25.	98.	7.
80000.	81.	45.	14.	-0.5		28.2	91.	28.	29.	98.	8.
85000.	72.	43.	21.	-0.4		31.0	91.	31.	32.	98.	8.
90000.	68.	51.	15.	0.4		33.6	89.	34.	34.	99.	9.
95000.	59.	51.	25.	-0.6		37.1	91.	37.	38.	99.	9.
100000.	57.	58.	26.	-2.3		40.2	93.	40.	41.	99.	10.

UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

AUGUST

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	MEAN WIND COMPONENTS (KNOTS)		RESULTANT DIRECTION (DEGREES)	VECTOR MEAN SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDAR VECTOR DEVIAT (KNOTS)
				+N	-S	+E	-W			
6000-	156.	20.	0.	-1.7		0.3		169.	2.	6.
8000-	156.	21.	1.	-1.8		-0.0		180.	2.	7.
10000-	157.	25.	0.	0.2		0.1		27.	0.	8.
12000-	157.	45.	1.	1.5		0.8		29.	2.	9.
14000-	157.	35.	1.	2.6		1.7		32.	3.	10.
15000-	150.	37.	1.	3.0		1.9		32.	3.	11.
16000-	156.	40.	0.	2.7		1.6		31.	3.	11.
18000-	156.	41.	1.	2.3		1.1		25.	3.	11.
20000-	156.	38.	1.	2.2		0.9		22.	2.	11.
25000-	149.	30.	1.	2.3		-2.2		316.	3.	13.
30000-	152.	42.	1.	2.5		-4.9		297.	6.	17.
35000-	144.	56.	0.	4.7		-8.7		298.	10.	21.
40000-	145.	66.	3.	4.9		-10.9		294.	12.	24.
45000-	134.	60.	4.	6.2		-8.8		305.	11.	23.
50000-	132.	49.	2.	4.4		-3.2		324.	5.	17.
55000-	119.	28.	1.	0.7		3.4		78.	3.	10.
60000-	110.	29.	1.	-1.7		9.6		100.	10.	12.
65000-	96.	29.	4.	-0.5		15.1		92.	15.	16.
70000-	93.	30.	0.	-2.0		19.8		96.	20.	20.
75000-	85.	35.	10.	-0.8		23.9		92.	24.	24.
80000-	80.	41.	0.	-0.9		26.3		92.	26.	27.
85000-	70.	42.	19.	0.3		29.4		89.	29.	30.
90000-	64.	42.	13.	1.3		32.1		88.	32.	33.
95000-	60.	52.	0.	0.2		36.0		90.	36.	37.
100000-	55.	57.	19.	-0.9		36.6		91.	37.	37.

UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

SEPTEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	MEAN WIND COMPONENTS (KNOTS)		RESULTANT DIRECTION (DEGREES)	VECTOR MEAN SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
				+N	-S					
6000.	124.	31.	0.	-1.9	-0.7	200.	2.	6.	32.	7.
8000.	123.	23.	1.	-2.1	-2.3	228.	3.	8.	37.	9.
10000.	123.	38.	1.	-1.8	-3.7	244.	4.	11.	37.	12.
12000.	122.	42.	2.	-1.7	-3.5	244.	4.	13.	30.	14.
14000.	122.	46.	1.	-1.3	-4.5	254.	5.	15.	31.	17.
15000.	118.	47.	1.	-1.1	-5.1	258.	5.	16.	33.	18.
16000.	122.	49.	1.	-1.2	-6.2	259.	6.	16.	39.	18.
18000.	121.	55.	1.	-0.5	-8.1	267.	8.	17.	47.	19.
20000.	122.	61.	1.	-0.8	-10.1	265.	10.	19.	55.	19.
25000.	116.	73.	1.	-1.1	-14.7	266.	15.	24.	61.	23.
30000.	120.	92.	2.	-2.1	-20.4	264.	20.	29.	70.	26.
35000.	115.	123.	8.	-1.4	-30.0	267.	30.	39.	76.	32.
40000.	114.	97.	0.	1.9	-36.6	273.	37.	44.	82.	31.
45000.	106.	89.	7.	1.2	-33.9	272.	34.	39.	86.	26.
50000.	105.	60.	0.	0.3	-22.3	271.	22.	28.	81.	20.
55000.	92.	40.	3.	0.2	-7.2	271.	7.	14.	52.	14.
60000.	63.	24.	1.	0.9	2.7	72.	3.	10.	29.	11.
65000.	77.	26.	1.	-0.2	7.6	91.	8.	10.	73.	9.
70000.	75.	30.	2.	0.5	9.3	87.	9.	12.	79.	9.
75000.	73.	32.	1.	0.3	12.4	89.	12.	14.	91.	9.
80000.	72.	35.	3.	-0.3	15.2	91.	15.	16.	93.	10.
85000.	70.	37.	1.	-0.5	15.2	92.	15.	16.	93.	10.
90000.	66.	37.	2.	-1.1	15.5	94.	16.	17.	93.	11.
95000.	62.	37.	3.	-1.3	17.3	94.	17.	19.	93.	11.
100000.	55.	38.	2.	-4.8	16.1	107.	17.	19.	90.	11.

UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

OCTOBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	MEAN WIND COMPONENTS (KNOTS)			RESULTANT DIRECTION (DEGREES)	VECTOR MEAN SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOI DEVIAT (KNOT)
				+N	-S	+E	-W				
6000.	145.	21.	0.	-1.1		-1.3	229.	2.	7.	25.	8
8000.	145.	30.	0.	-1.0		-3.3	253.	3.	9.	37.	10
10000.	145.	39.	1.	0.4		-4.4	276.	4.	12.	37.	13
12000.	145.	45.	1.	1.7		-6.1	285.	6.	15.	42.	17
14000.	142.	57.	2.	3.1		-7.3	293.	8.	18.	44.	20
15000.	137.	59.	1.	2.6		-8.2	289.	9.	19.	46.	20
16000.	141.	59.	1.	3.4		-8.7	291.	9.	20.	47.	21
18000.	140.	65.	1.	4.1		-10.5	292.	11.	22.	52.	23
20000.	140.	68.	1.	3.8		-11.7	288.	12.	24.	52.	25
25000.	136.	85.	1.	3.8		-14.5	285.	15.	30.	49.	33
30000.	137.	132.	2.	3.4		-19.1	280.	19.	38.	51.	41
35000.	132.	118.	5.	3.9		-25.7	279.	26.	44.	59.	44
40000.	131.	121.	6.	3.0		-30.0	276.	30.	45.	68.	42
45000.	117.	117.	2.	3.9		-30.5	277.	31.	40.	76.	35
50000.	107.	91.	3.	6.1		-22.9	285.	24.	30.	79.	25
55000.	94.	89.	0.	5.6		-14.8	291.	16.	20.	78.	20
60000.	89.	34.	2.	2.7		-6.7	292.	7.	13.	56.	13
65000.	82.	27.	1.	1.8		-3.5	297.	4.	9.	42.	10
70000.	79.	32.	1.	1.5		-4.1	291.	4.	8.	52.	9
75000.	75.	22.	1.	0.3		-5.0	273.	5.	10.	51.	10
80000.	71.	39.	2.	1.3		-5.8	283.	6.	13.	45.	14
85000.	57.	36.	3.	0.2		-11.0	271.	11.	16.	68.	15
90000.	53.	48.	2.	-0.7		-14.5	267.	14.	20.	74.	18
95000.	46.	68.	3.	-0.9		-19.2	267.	19.	22.	86.	18
100000.	33.	51.	0.	-2.4		-25.3	265.	25.	27.	93.	18

UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

NOVEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	MEAN WIND COMPONENTS (KNOTS)			RESULTANT DIRECTION (DEGREES)	VECTOR MEAN SPEED (KNOTS)	SCALAR W/FAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIAT/ (KNOT)
				+N	-S	+E	-W				
6000.	159.	27.	1.	-1.4		-2.8	243.	3.	7.	48.	7.
8000.	160.	38.	1.	-1.7		-7.6	258.	8.	12.	67.	11.
10000.	159.	45.	1.	0.1		-11.2	270.	11.	16.	68.	15.
12000.	159.	49.	1.	2.4		-14.2	280.	14.	20.	71.	18.
14000.	160.	71.	1.	3.4		-16.3	282.	17.	24.	70.	22.
15000.	156.	67.	1.	3.3		-17.0	281.	17.	25.	70.	23.
16000.	156.	70.	1.	3.3		-17.9	280.	18.	27.	68.	25.
18000.	157.	84.	1.	3.3		-20.0	279.	20.	30.	68.	27.
20000.	157.	90.	1.	2.9		-22.7	277.	23.	33.	70.	29.
25000.	156.	110.	8.	3.8		-29.3	277.	30.	40.	74.	34.
30000.	154.	130.	C.	3.6		-35.3	276.	35.	48.	74.	42.
35000.	138.	146.	8.	4.2		-40.2	276.	40.	53.	76.	44.
40000.	126.	144.	14.	5.7		-46.8	277.	47.	58.	81.	43.
45000.	111.	106.	8.	2.1		-45.1	273.	45.	52.	87.	33.
50000.	99.	96.	4.	2.7		-39.7	274.	40.	45.	89.	27.
55000.	85.	72.	0.	2.2		-29.8	274.	30.	32.	93.	19.
60000.	77.	61.	4.	2.6		-18.9	278.	19.	22.	87.	16.
65000.	74.	43.	0.	2.1		-12.2	280.	12.	15.	81.	13.
70000.	62.	41.	0.	2.1		-11.7	280.	12.	15.	77.	14.
75000.	54.	47.	2.	0.3		-11.9	271.	12.	17.	68.	16.
80000.	50.	44.	0.	-1.3		-15.2	265.	15.	20.	75.	18.
85000.	44.	63.	5.	-0.7		-20.6	268.	21.	25.	81.	22.
90000.	41.	79.	8.	-1.9		-25.3	266.	25.	29.	86.	23.
95000.	41.	84.	5.	-4.2		-32.5	263.	33.	36.	90.	26.
100000.	34.	94.	0.	-3.3		-35.7	265.	36.	41.	88.	32.

UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

DECEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	MEAN WIND COMPONENTS (KNOTS)		RESULTANT DIRECTION (DEGREES)	VECTOR MEAN SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIAT (KNOTS)
				+N	-S	+E	-W			
6000.	148.	32.	0.	-1.9		-3.7		4.	47.	10.
8000.	149.	43.	1.	-1.4		-8.0		8.	61.	14.
10000.	149.	50.	1.	0.7		-12.7		13.	69.	17.
12000.	149.	53.	1.	1.7		-16.0		16.	71.	21.
14000.	149.	63.	1.	2.3		-18.8		19.	70.	25.
15000.	149.	74.	2.	1.9		-20.6		21.	71.	27.
16000.	148.	80.	3.	1.4		-22.1		22.	72.	28.
18000.	147.	86.	1.	1.2		-24.4		24.	73.	30.
20000.	146.	93.	3.	0.7		-27.1		27.	73.	33.
25000.	138.	122.	3.	-2.5		-34.9		35.	77.	40.
30000.	134.	161.	2.	-4.7		-42.2		42.	79.	47.
35000.	126.	174.	2.	-4.8		-46.7		47.	81.	50.
40000.	116.	148.	8.	-4.6		-49.3		50.	87.	42.
45000.	107.	137.	4.	-0.7		-46.8		47.	89.	33.
50000.	91.	100.	7.	1.4		-40.1		40.	90.	26.
55000.	81.	71.	0.	2.9		-29.3		29.	88.	22.
60000.	73.	51.	4.	2.5		-19.3		19.	83.	17.
65000.	65.	48.	4.	3.9		-14.0		15.	85.	12.
70000.	63.	40.	2.	3.9		-8.8		10.	70.	13.
75000.	61.	42.	2.	2.6		-11.9		12.	73.	14.
80000.	57.	57.	1.	1.7		-16.1		16.	84.	14.
85000.	53.	69.	2.	-0.2		-22.8		23.	97.	16.
90000.	52.	82.	6.	-2.5		-32.8		33.	98.	20.
95000.	42.	108.	9.	-5.5		-47.3		48.	98.	27.
100000.	37.	126.	11.	-7.7		-57.9		58.	98.	30.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

JANUARY

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	WIND DIRECTIONS (DEGREES)										CALM	
		≥360 < 30	≥30 < 60	≥60 < 90	≥90 < 120	≥120 < 150	≥150 < 180	≥180 < 210	≥210 < 240	≥240 < 270	≥270 < 300	≥300 < 330	≥330 < 360
6000.	118.	2.	2.	1.	3.	6.	8.	12.	14.	12.	21.	15.	2.
8000.	117.	9.	1.	3.	1.	4.	3.	10.	17.	26.	16.	9.	0.
10000.	117.	4.	3.	1.	2.	2.	3.	8.	15.	26.	22.	14.	0.
12000.	116.	4.	0.	3.	1.	0.	1.	6.	13.	34.	19.	14.	0.
14000.	116.	7.	2.	2.	0.	0.	2.	5.	16.	34.	16.	12.	0.
15000.	116.	9.	2.	3.	0.	0.	2.	6.	16.	33.	16.	10.	0.
16000.	116.	8.	3.	2.	0.	0.	2.	6.	16.	35.	16.	11.	0.
18000.	116.	8.	3.	2.	0.	0.	2.	6.	17.	36.	15.	9.	0.
20000.	115.	9.	3.	2.	1.	0.	3.	7.	13.	41.	10.	10.	0.
25000.	115.	7.	4.	2.	0.	0.	3.	5.	22.	28.	15.	13.	0.
30000.	109.	8.	4.	1.	0.	0.	2.	6.	24.	28.	17.	7.	0.
35000.	103.	4.	4.	4.	0.	0.	0.	2.	31.	33.	17.	6.	0.
40000.	102.	1.	4.	1.	0.	0.	0.	2.	41.	30.	14.	6.	0.
45000.	95.	2.	2.	0.	0.	0.	0.	1.	51.	27.	14.	3.	0.
50000.	84.	0.	1.	0.	0.	0.	0.	1.	45.	38.	10.	4.	0.
55000.	69.	1.	0.	0.	0.	1.	3.	3.	48.	32.	9.	3.	0.
60000.	56.	0.	4.	0.	4.	2.	2.	2.	30.	37.	16.	4.	0.
65000.	50.	4.	4.	2.	0.	2.	0.	4.	34.	29.	8.	10.	2.
70000.	44.	9.	2.	2.	11.	5.	0.	2.	14.	30.	11.	11.	0.
75000.	38.	16.	11.	0.	8.	0.	3.	0.	18.	18.	16.	8.	0.
80000.	37.	14.	11.	3.	5.	0.	3.	3.	11.	32.	5.	14.	0.
85000.	35.	6.	11.	0.	6.	0.	3.	6.	20.	26.	11.	11.	0.
90000.	31.	3.	10.	0.	2.	3.	0.	6.	19.	32.	10.	13.	0.
95000.	23.	4.	0.	9.	4.	0.	4.	17.	22.	22.	9.	4.	0.
100000.	15.	0.	0.	0.	0.	0.	7.	20.	20.	47.	0.	7.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

FEBRUARY

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	WIND DIRECTIONS (DEGREES)										CALM		
		≥ 360 < 30	≥ 30 < 60	≥ 60 < 90	≥ 90 < 120	≥ 120 < 150	≥ 150 < 180	≥ 180 < 210	≥ 210 < 240	≥ 240 < 270	≥ 270 < 300	≥ 300 < 330	≥ 330 < 360	CALM
6000.	112.	10.	9.	0.	1.	1.	5.	9.	15.	12.	12.	16.	9.	1.
8000.	112.	5.	5.	4.	1.	1.	3.	6.	14.	8.	24.	19.	9.	0.
10000.	111.	5.	5.	3.	0.	0.	3.	1.	10.	14.	27.	25.	8.	0.
12000.	111.	5.	2.	4.	0.	0.	2.	0.	5.	19.	30.	23.	10.	0.
14000.	111.	3.	5.	2.	0.	0.	0.	0.	6.	20.	36.	19.	10.	0.
15000.	110.	3.	5.	2.	0.	0.	0.	0.	4.	22.	35.	19.	11.	0.
16000.	111.	4.	3.	3.	0.	0.	0.	1.	3.	24.	34.	17.	12.	0.
18000.	110.	5.	3.	4.	0.	0.	0.	0.	3.	26.	33.	17.	10.	0.
20000.	110.	5.	3.	4.	0.	0.	0.	1.	3.	27.	31.	16.	10.	0.
25000.	107.	3.	4.	3.	0.	0.	0.	1.	3.	28.	28.	19.	12.	0.
30000.	105.	5.	3.	2.	0.	0.	0.	1.	5.	32.	34.	10.	9.	0.
35000.	100.	4.	2.	0.	0.	0.	0.	0.	5.	32.	31.	12.	13.	0.
40000.	93.	1.	0.	0.	0.	0.	0.	0.	8.	34.	30.	19.	3.	0.
45000.	90.	0.	0.	0.	0.	0.	0.	0.	6.	38.	31.	22.	3.	0.
50000.	75.	0.	0.	0.	0.	0.	0.	0.	7.	29.	43.	19.	3.	0.
55000.	64.	2.	2.	0.	0.	0.	2.	2.	2.	31.	39.	16.	6.	0.
60000.	58.	2.	0.	0.	0.	0.	0.	0.	5.	34.	31.	21.	7.	0.
65000.	56.	4.	4.	2.	4.	0.	4.	2.	7.	23.	32.	18.	2.	0.
70000.	54.	6.	4.	9.	7.	0.	0.	6.	6.	28.	20.	15.	0.	0.
75000.	50.	2.	2.	16.	2.	0.	2.	0.	2.	40.	28.	6.	0.	0.
80000.	47.	2.	2.	13.	9.	0.	0.	2.	15.	32.	17.	4.	4.	0.
85000.	43.	0.	5.	14.	5.	0.	0.	0.	9.	49.	14.	0.	2.	0.
90000.	38.	5.	0.	16.	3.	0.	0.	11.	8.	37.	16.	3.	3.	0.
95000.	30.	0.	3.	17.	3.	0.	0.	0.	7.	43.	17.	3.	3.	0.
100000.	25.	0.	0.	16.	16.	0.	0.	0.	4.	16.	32.	12.	4.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

MARCH

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	WIND DIRECTIONS (DEGREES)												CALM
		≥ 360 < 30	≥ 30 < 60	≥ 60 < 90	≥ 90 < 120	≥ 120 < 150	≥ 150 < 180	≥ 180 < 210	≥ 210 < 240	≥ 240 < 270	≥ 270 < 300	≥ 300 < 330	≥ 330 < 360	
6000.	161.	4.	2.	2.	1.	5.	15.	20.	17.	9.	6.	12.	0.	
8000.	161.	2.	2.	0.	1.	2.	5.	8.	28.	16.	14.	9.	0.	
10000.	160.	3.	1.	1.	0.	2.	2.	4.	20.	29.	9.	11.	0.	
12000.	158.	4.	3.	1.	1.	1.	0.	3.	17.	32.	15.	5.	0.	
14000.	158.	3.	1.	3.	1.	0.	1.	1.	19.	32.	16.	4.	0.	
15000.	155.	3.	2.	2.	1.	0.	1.	1.	15.	35.	13.	5.	0.	
16000.	159.	2.	4.	2.	0.	0.	1.	1.	12.	29.	13.	4.	0.	
18000.	158.	2.	3.	3.	0.	0.	1.	1.	11.	37.	13.	3.	1.	
20000.	157.	2.	3.	3.	1.	0.	0.	3.	8.	43.	10.	4.	0.	
25000.	152.	1.	3.	3.	1.	0.	0.	1.	10.	44.	10.	3.	1.	
30000.	154.	3.	2.	4.	0.	0.	1.	1.	10.	40.	9.	3.	1.	
35000.	147.	1.	3.	3.	0.	0.	0.	2.	5.	44.	10.	3.	0.	
40000.	145.	3.	1.	3.	0.	0.	0.	1.	3.	47.	8.	3.	0.	
45000.	132.	0.	0.	0.	0.	0.	0.	1.	2.	58.	11.	2.	0.	
50000.	129.	0.	0.	0.	0.	0.	0.	0.	4.	53.	9.	1.	0.	
55000.	112.	0.	0.	0.	1.	0.	0.	0.	2.	54.	9.	1.	1.	
60000.	102.	0.	0.	3.	1.	2.	0.	1.	6.	48.	11.	1.	1.	
65000.	88.	1.	1.	1.	1.	0.	0.	3.	10.	32.	18.	3.	2.	
70000.	85.	1.	0.	6.	1.	6.	1.	4.	13.	35.	9.	6.	2.	
75000.	70.	0.	4.	4.	3.	0.	1.	3.	7.	39.	11.	0.	3.	
80000.	57.	4.	5.	2.	0.	2.	4.	2.	5.	40.	11.	0.	2.	
85000.	47.	2.	0.	0.	0.	0.	4.	6.	15.	40.	9.	2.	0.	
90000.	43.	0.	0.	0.	2.	0.	0.	0.	12.	35.	14.	0.	0.	
95000.	39.	3.	0.	0.	0.	0.	0.	0.	8.	44.	13.	0.	0.	
100000.	29.	0.	3.	0.	0.	0.	3.	0.	7.	45.	7.	0.	3.	

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

APRIL

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	WIND DIRECTIONS (DEGREES)										CALM			
		> 360 < 30	> 30 < 60	> 60 < 90	> 90 < 120	> 120 < 150	> 150 < 180	> 180 < 210	> 210 < 240	> 240 < 270	> 270 < 300	> 300 < 330	> 330 < 360		
6000.	139.	6.	9.	1.	1.	3.	13.	21.	19.	8.	6.	7.	4.	0.	0.
8000.	137.	6.	4.	2.	2.	1.	8.	14.	20.	20.	12.	5.	5.	0.	0.
10000.	137.	1.	1.	1.	3.	4.	2.	9.	21.	27.	17.	9.	6.	0.	0.
12000.	137.	4.	0.	1.	1.	2.	3.	8.	21.	27.	22.	6.	4.	0.	0.
14000.	137.	3.	0.	1.	1.	1.	1.	7.	23.	34.	18.	6.	7.	0.	0.
15000.	136.	4.	1.	0.	0.	1.	1.	5.	26.	30.	28.	7.	7.	0.	0.
16000.	136.	4.	1.	0.	0.	0.	1.	5.	26.	32.	18.	0.	7.	0.	0.
18000.	137.	1.	0.	0.	0.	0.	1.	1.	24.	37.	15.	10.	9.	0.	0.
20000.	137.	1.	0.	0.	0.	0.	1.	2.	22.	40.	14.	10.	13.	0.	0.
25000.	136.	2.	0.	0.	0.	0.	0.	2.	27.	36.	16.	10.	6.	0.	0.
30000.	135.	4.	1.	0.	0.	0.	1.	0.	26.	39.	16.	10.	4.	0.	0.
35000.	129.	4.	1.	0.	0.	0.	2.	2.	22.	43.	15.	8.	4.	0.	0.
40000.	124.	1.	2.	0.	0.	0.	0.	3.	21.	49.	15.	3.	5.	2.	2.
45000.	115.	3.	0.	0.	0.	0.	2.	1.	23.	56.	11.	4.	0.	1.	1.
50000.	109.	0.	0.	0.	0.	1.	0.	3.	14.	60.	18.	2.	1.	2.	2.
55000.	101.	0.	0.	0.	1.	1.	1.	4.	18.	53.	17.	1.	1.	1.	1.
60000.	92.	0.	1.	1.	1.	1.	3.	5.	21.	48.	14.	5.	0.	1.	1.
65000.	84.	2.	0.	6.	5.	1.	14.	7.	15.	14.	17.	13.	5.	0.	0.
70000.	81.	4.	4.	17.	15.	9.	7.	7.	5.	19.	9.	5.	0.	0.	0.
75000.	78.	1.	6.	13.	17.	10.	6.	5.	12.	15.	4.	3.	3.	0.	0.
80000.	75.	1.	3.	17.	16.	9.	5.	11.	15.	13.	5.	1.	3.	0.	0.
85000.	70.	3.	3.	7.	14.	3.	4.	13.	16.	23.	9.	1.	4.	0.	0.
90000.	65.	2.	2.	8.	6.	11.	8.	0.	12.	28.	17.	5.	2.	2.	2.
95000.	57.	0.	2.	4.	5.	2.	2.	5.	16.	39.	9.	7.	4.	7.	7.
100000.	41.	0.	2.	0.	5.	5.	0.	2.	15.	44.	17.	7.	0.	0.	2.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

MAY

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	WIND DIRECTIONS (DEGREES)												CALM
		≥ 360 < 30	≥ 30 < 60	≥ 60 < 90	≥ 90 < 120	≥ 120 < 150	≥ 150 < 180	≥ 180 < 210	≥ 210 < 240	≥ 240 < 270	≥ 270 < 300	≥ 300 < 330	≥ 330 < 360	
6000.	128.	5.	5.	6.	5.	4.	21.	15.	12.	12.	6.	6.	4.	1.
8000.	126.	3.	2.	3.	2.	4.	6.	20.	29.	15.	7.	6.	3.	0.
10000.	125.	3.	0.	1.	2.	3.	2.	7.	30.	30.	13.	8.	1.	0.
12000.	124.	3.	1.	1.	2.	2.	2.	6.	23.	36.	19.	2.	3.	0.
14000.	124.	3.	2.	0.	3.	3.	1.	10.	23.	32.	18.	3.	2.	0.
15000.	121.	2.	2.	2.	2.	3.	2.	7.	26.	35.	16.	4.	1.	0.
16000.	121.	2.	2.	2.	2.	2.	2.	5.	24.	36.	16.	6.	1.	0.
18000.	120.	1.	2.	2.	2.	2.	2.	7.	20.	41.	16.	3.	2.	0.
20000.	120.	2.	2.	2.	2.	0.	2.	6.	14.	47.	18.	5.	1.	0.
25000.	119.	2.	1.	2.	1.	1.	3.	4.	15.	48.	19.	5.	0.	0.
30000.	121.	2.	2.	2.	0.	0.	4.	2.	15.	52.	14.	4.	0.	1.
35000.	114.	2.	3.	1.	1.	1.	0.	3.	12.	53.	20.	4.	2.	0.
40000.	115.	2.	1.	0.	0.	3.	0.	3.	10.	54.	19.	4.	3.	2.
45000.	103.	0.	0.	0.	0.	0.	0.	2.	12.	58.	20.	6.	1.	1.
50000.	100.	0.	0.	0.	0.	0.	0.	1.	17.	47.	30.	5.	0.	0.
55000.	98.	0.	0.	0.	0.	0.	0.	5.	23.	30.	31.	6.	2.	3.
60000.	94.	3.	2.	1.	3.	5.	11.	6.	17.	21.	19.	12.	4.	0.
65000.	91.	8.	7.	7.	5.	9.	12.	12.	3.	4.	9.	10.	13.	2.
70000.	90.	6.	10.	18.	19.	8.	12.	8.	7.	2.	3.	1.	6.	1.
75000.	81.	4.	10.	26.	27.	6.	12.	4.	2.	5.	4.	1.	5.	0.
80000.	78.	6.	6.	15.	23.	17.	10.	5.	4.	3.	4.	1.	4.	1.
85000.	73.	3.	3.	14.	32.	10.	8.	4.	10.	8.	1.	4.	4.	0.
90000.	71.	1.	8.	13.	21.	14.	0.	1.	10.	17.	11.	1.	3.	1.
95000.	64.	0.	0.	17.	16.	8.	9.	5.	11.	17.	9.	5.	0.	5.
100000.	51.	0.	4.	10.	20.	10.	2.	6.	12.	18.	10.	6.	2.	2.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS 4IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1942-1967

JUNE

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	WIND DIRECTIONS (DEGREES)										CALM		
		> 360 < 30	> 30 < 60	> 60 < 90	> 90 < 120	> 120 < 150	> 150 < 180	> 180 < 210	> 210 < 240	> 240 < 270	> 270 < 300		> 300 < 330	> 330 < 360
6000.	127.	4.	1.	2.	2.	6.	20.	28.	17.	6.	2.	8.	5.	1.
8000.	127.	2.	1.	0.	1.	4.	13.	20.	30.	17.	9.	2.	2.	0.
10000.	127.	1.	2.	1.	1.	2.	8.	17.	27.	26.	9.	6.	2.	0.
12000.	128.	5.	5.	1.	0.	1.	5.	13.	32.	23.	5.	4.	8.	0.
14000.	127.	6.	6.	3.	1.	1.	6.	9.	35.	22.	5.	1.	5.	0.
15000.	124.	3.	10.	2.	2.	0.	6.	10.	34.	23.	4.	2.	2.	0.
16000.	126.	2.	9.	5.	1.	1.	4.	13.	32.	21.	6.	3.	3.	0.
18000.	125.	2.	6.	4.	3.	2.	2.	13.	26.	23.	10.	2.	2.	0.
20000.	125.	1.	6.	1.	2.	2.	2.	9.	27.	29.	12.	6.	2.	0.
25000.	124.	1.	3.	1.	1.	2.	2.	6.	27.	31.	15.	6.	6.	0.
30000.	120.	1.	1.	0.	0.	1.	0.	4.	28.	35.	19.	10.	1.	0.
35000.	114.	0.	0.	0.	0.	0.	0.	4.	34.	32.	16.	9.	4.	0.
40000.	115.	0.	0.	0.	0.	0.	0.	2.	29.	35.	23.	8.	3.	1.
45000.	112.	0.	0.	0.	0.	0.	0.	0.	26.	39.	25.	8.	2.	0.
50000.	105.	0.	0.	0.	0.	0.	1.	3.	28.	35.	25.	5.	2.	0.
55000.	99.	2.	2.	4.	1.	4.	3.	18.	23.	19.	9.	10.	4.	0.
60000.	97.	3.	5.	14.	21.	12.	16.	13.	5.	3.	1.	1.	4.	0.
65000.	95.	1.	4.	21.	36.	23.	6.	4.	1.	2.	0.	0.	0.	1.
70000.	92.	1.	4.	37.	39.	11.	4.	2.	0.	0.	0.	0.	0.	0.
75000.	89.	0.	1.	36.	54.	8.	1.	0.	0.	0.	0.	0.	0.	0.
80000.	79.	0.	0.	24.	59.	15.	1.	0.	0.	0.	0.	0.	0.	0.
85000.	74.	0.	1.	39.	47.	8.	1.	0.	1.	0.	0.	0.	0.	1.
90000.	60.	0.	2.	36.	52.	9.	2.	0.	0.	0.	0.	0.	0.	0.
95000.	59.	2.	2.	37.	51.	7.	2.	0.	0.	0.	0.	0.	0.	0.
100000.	54.	0.	4.	28.	63.	4.	0.	0.	0.	3.	0.	0.	0.	2.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

JULY

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	WIND DIRECTIONS (DEGREES)												CALM
		≥360 < 30	≥30 < 60	≥60 < 90	≥90 < 120	≥120 < 150	≥150 < 180	≥180 < 210	≥210 < 240	≥240 < 270	≥270 < 300	≥300 < 330	≥330 < 360	
6000.	149.	6.	6.	5.	5.	16.	15.	16.	10.	7.	3.	3.	7.	1.
8000.	149.	2.	6.	5.	5.	9.	19.	13.	18.	5.	7.	3.	7.	1.
10000.	149.	4.	7.	5.	7.	9.	13.	13.	16.	7.	6.	6.	5.	1.
12000.	149.	5.	7.	9.	13.	11.	12.	13.	6.	5.	9.	5.	5.	1.
14000.	149.	9.	6.	9.	14.	13.	13.	11.	10.	5.	2.	2.	5.	0.
15000.	141.	8.	6.	9.	14.	17.	12.	12.	6.	7.	1.	1.	6.	0.
16000.	149.	8.	4.	9.	17.	15.	12.	12.	5.	5.	3.	2.	6.	1.
18000.	148.	5.	5.	11.	18.	10.	13.	9.	10.	3.	3.	1.	8.	0.
20000.	147.	4.	4.	12.	13.	16.	10.	17.	7.	10.	3.	1.	3.	0.
25000.	139.	4.	5.	9.	12.	12.	12.	19.	14.	6.	4.	1.	1.	0.
30000.	145.	5.	6.	6.	8.	10.	22.	18.	12.	6.	3.	2.	2.	0.
35000.	133.	2.	5.	5.	11.	14.	16.	15.	15.	7.	3.	3.	3.	0.
40000.	137.	5.	5.	6.	11.	12.	17.	9.	17.	9.	4.	3.	3.	0.
45000.	121.	3.	5.	9.	9.	10.	21.	12.	10.	7.	4.	3.	6.	0.
50000.	118.	7.	8.	8.	16.	16.	10.	13.	12.	3.	3.	0.	3.	0.
55000.	104.	0.	6.	18.	28.	24.	14.	6.	3.	0.	0.	0.	1.	0.
60000.	102.	2.	5.	22.	46.	21.	2.	2.	1.	0.	0.	0.	0.	0.
65000.	91.	0.	0.	33.	55.	10.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	89.	0.	0.	38.	60.	2.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	81.	0.	0.	35.	65.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	81.	0.	1.	43.	56.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	72.	0.	0.	40.	60.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	68.	0.	0.	47.	53.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	59.	0.	0.	42.	58.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	57.	0.	0.	37.	63.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

AUGUST

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	WIND DIRECTIONS (DEGREES)										CALM		
		≥ 360 < 30	≥ 30 < 60	≥ 60 < 90	≥ 90 < 120	≥ 120 < 150	≥ 150 < 180	≥ 180 < 210	≥ 210 < 240	≥ 240 < 270	≥ 270 < 300	≥ 300 < 330	≥ 330 < 360	
6000.	156.	6.	10.	6.	4.	8.	19.	13.	13.	6.	5.	4.	2.	2.
8000.	156.	4.	6.	6.	10.	9.	18.	11.	15.	6.	3.	8.	4.	0.
10000.	157.	7.	10.	6.	8.	12.	8.	7.	7.	13.	4.	6.	11.	1.
12000.	157.	9.	12.	8.	13.	8.	3.	5.	10.	6.	6.	7.	12.	0.
14000.	157.	10.	10.	18.	11.	4.	1.	5.	10.	6.	4.	7.	14.	0.
15000.	150.	9.	15.	15.	11.	5.	3.	2.	8.	7.	5.	5.	16.	0.
16000.	156.	11.	13.	13.	12.	6.	3.	4.	10.	6.	2.	4.	15.	1.
18000.	156.	12.	9.	12.	12.	8.	3.	7.	10.	4.	3.	6.	13.	0.
20000.	156.	10.	11.	14.	9.	6.	2.	10.	12.	4.	3.	6.	13.	0.
25000.	149.	6.	5.	10.	8.	5.	5.	5.	13.	9.	6.	10.	17.	0.
30000.	152.	5.	8.	7.	3.	6.	4.	4.	13.	7.	15.	12.	14.	0.
35000.	144.	8.	6.	3.	6.	3.	6.	0.	12.	8.	9.	26.	11.	1.
40000.	145.	10.	4.	2.	6.	3.	1.	4.	10.	12.	13.	19.	14.	0.
45000.	134.	7.	10.	1.	4.	6.	5.	2.	7.	7.	13.	17.	18.	0.
50000.	132.	13.	8.	7.	3.	5.	3.	6.	5.	10.	11.	15.	14.	0.
55000.	119.	8.	14.	21.	10.	6.	7.	7.	7.	6.	5.	3.	7.	0.
60000.	110.	3.	9.	26.	28.	15.	7.	8.	3.	0.	0.	0.	0.	0.
65000.	96.	0.	3.	41.	49.	6.	0.	0.	0.	0.	1.	0.	0.	0.
70000.	93.	0.	0.	33.	62.	2.	1.	0.	0.	0.	0.	0.	0.	1.
75000.	85.	0.	0.	39.	61.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	80.	0.	1.	31.	65.	0.	0.	0.	0.	0.	0.	0.	0.	3.
85000.	70.	0.	0.	47.	53.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	64.	0.	2.	47.	52.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	60.	0.	3.	33.	62.	0.	0.	0.	0.	0.	0.	0.	0.	2.
100000.	55.	0.	2.	38.	60.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

SEPTEMBER

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	WIND DIRECTIONS (DEGREES)												CALM
		≥ 360 < 30	≥ 30 < 60	≥ 60 < 90	≥ 90 < 120	≥ 120 < 150	≥ 150 < 180	≥ 180 < 210	≥ 210 < 240	≥ 240 < 270	≥ 270 < 300	≥ 300 < 330	≥ 330 < 360	
6000.	124.	8.	9.	6.	2.	3.	19.	12.	12.	10.	8.	5.	5.	2.
8000.	123.	5.	7.	7.	5.	4.	7.	13.	23.	10.	9.	6.	6.	0.
10000.	123.	5.	6.	7.	3.	2.	7.	10.	20.	12.	17.	7.	3.	0.
12000.	122.	5.	3.	11.	3.	8.	5.	11.	14.	16.	11.	8.	5.	0.
14000.	122.	6.	7.	9.	9.	3.	4.	11.	13.	16.	10.	8.	3.	0.
15000.	118.	6.	7.	8.	8.	3.	2.	13.	15.	17.	9.	9.	3.	0.
16000.	122.	5.	10.	7.	6.	2.	3.	9.	20.	16.	11.	8.	3.	0.
18000.	121.	7.	11.	3.	3.	1.	4.	7.	18.	22.	7.	8.	7.	0.
20000.	122.	8.	6.	4.	2.	0.	3.	7.	15.	27.	10.	10.	7.	0.
25000.	116.	3.	4.	3.	1.	4.	0.	6.	16.	25.	15.	16.	7.	0.
30000.	120.	2.	2.	2.	4.	2.	1.	4.	19.	25.	22.	10.	7.	0.
35000.	115.	2.	2.	3.	1.	2.	1.	6.	12.	30.	25.	12.	5.	0.
40000.	114.	1.	0.	0.	1.	2.	1.	6.	6.	32.	30.	13.	8.	1.
45000.	106.	2.	0.	0.	1.	0.	2.	4.	11.	21.	42.	12.	5.	0.
50000.	105.	1.	0.	0.	0.	1.	2.	5.	10.	31.	29.	10.	10.	1.
55000.	92.	13.	7.	2.	4.	1.	3.	9.	13.	16.	21.	7.	4.	0.
60000.	83.	10.	14.	13.	13.	7.	8.	5.	7.	6.	5.	8.	2.	0.
65000.	77.	1.	12.	19.	35.	9.	8.	1.	1.	3.	5.	4.	1.	0.
70000.	75.	3.	12.	44.	21.	7.	7.	1.	3.	3.	1.	0.	0.	0.
75000.	73.	1.	7.	41.	36.	8.	1.	3.	0.	0.	1.	0.	1.	0.
80000.	72.	0.	4.	47.	36.	7.	0.	4.	0.	0.	1.	0.	0.	0.
85000.	70.	1.	4.	44.	36.	7.	4.	3.	0.	0.	0.	0.	0.	0.
90000.	66.	0.	5.	35.	44.	9.	3.	2.	0.	0.	0.	0.	0.	0.
95000.	62.	0.	3.	32.	50.	10.	2.	0.	2.	0.	0.	2.	0.	0.
100000.	55.	0.	2.	22.	47.	22.	4.	0.	2.	2.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

OCTOBER

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	WIND DIRECTIONS (DEGREES)												CALM
		≥ 360 < 30	≥ 30 < 60	≥ 60 < 90	≥ 90 < 120	≥ 120 < 150	≥ 150 < 180	≥ 180 < 210	≥ 210 < 240	≥ 240 < 270	≥ 270 < 300	≥ 300 < 330	≥ 330 < 360	
6000.	145.	10.	9.	2.	3.	6.	10.	13.	13.	8.	8.	6.	11.	1.
8000.	145.	10.	4.	2.	6.	3.	8.	12.	11.	13.	12.	6.	11.	1.
10000.	145.	8.	8.	5.	4.	3.	4.	12.	11.	11.	11.	14.	9.	0.
12000.	145.	11.	10.	5.	5.	0.	1.	10.	10.	12.	12.	13.	10.	0.
14000.	142.	13.	6.	3.	5.	1.	1.	9.	7.	15.	15.	11.	13.	0.
15000.	137.	13.	7.	3.	4.	0.	0.	11.	8.	15.	15.	13.	11.	0.
16000.	141.	11.	9.	4.	1.	0.	1.	9.	9.	13.	16.	14.	13.	0.
18000.	140.	12.	9.	4.	1.	1.	1.	4.	13.	12.	16.	16.	11.	0.
20000.	140.	15.	7.	4.	3.	1.	1.	1.	15.	15.	14.	17.	7.	0.
25000.	136.	12.	8.	5.	1.	0.	3.	1.	16.	12.	12.	15.	14.	0.
30000.	137.	16.	4.	4.	1.	0.	1.	2.	17.	12.	12.	9.	13.	0.
35000.	132.	14.	3.	4.	0.	0.	0.	1.	17.	16.	16.	20.	8.	0.
40000.	131.	8.	4.	2.	0.	0.	0.	0.	15.	19.	24.	15.	13.	0.
45000.	117.	8.	1.	0.	0.	0.	0.	1.	10.	21.	33.	19.	8.	0.
50000.	107.	2.	3.	0.	0.	0.	0.	1.	10.	20.	26.	25.	13.	0.
55000.	94.	6.	1.	1.	0.	0.	1.	0.	11.	20.	20.	28.	11.	1.
60000.	89.	8.	1.	1.	4.	1.	3.	7.	13.	8.	11.	31.	10.	0.
65000.	92.	6.	2.	5.	4.	5.	5.	6.	10.	13.	13.	10.	21.	0.
70000.	79.	6.	8.	3.	6.	4.	3.	3.	8.	19.	25.	9.	8.	0.
75000.	75.	5.	4.	7.	4.	4.	7.	3.	9.	21.	21.	12.	3.	0.
80000.	71.	1.	8.	13.	4.	3.	1.	1.	4.	25.	25.	6.	7.	0.
85000.	57.	4.	9.	7.	4.	4.	4.	4.	4.	28.	25.	5.	5.	0.
90000.	53.	8.	4.	2.	4.	8.	0.	6.	8.	32.	21.	6.	4.	0.
95000.	46.	4.	2.	4.	2.	0.	0.	7.	4.	37.	35.	2.	2.	0.
100000.	33.	3.	0.	0.	6.	0.	0.	3.	3.	45.	33.	3.	0.	3.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

NOVEMBER

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	WIND DIRECTIONS (DEGREES)												CALM
		≥ 360 < 30	≥ 30 < 60	≥ 60 < 90	≥ 90 < 120	≥ 120 < 150	≥ 150 < 180	≥ 180 < 210	≥ 210 < 240	≥ 240 < 270	≥ 270 < 300	≥ 300 < 330	≥ 330 < 360	
6000.	159.	2.	6.	2.	3.	3.	6.	16.	16.	17.	12.	7.	11.	0.
8000.	160.	4.	3.	2.	1.	1.	3.	8.	22.	19.	18.	11.	9.	0.
10000.	159.	5.	1.	1.	1.	1.	4.	4.	19.	18.	18.	13.	14.	0.
12000.	159.	6.	1.	1.	1.	1.	1.	1.	16.	24.	14.	22.	13.	0.
14000.	160.	5.	3.	2.	0.	1.	2.	3.	12.	26.	17.	19.	11.	0.
15000.	156.	5.	3.	1.	0.	1.	1.	2.	13.	28.	17.	14.	15.	0.
16000.	156.	9.	2.	2.	0.	1.	0.	3.	15.	24.	19.	16.	10.	0.
18000.	157.	6.	2.	1.	2.	1.	0.	2.	13.	27.	17.	20.	10.	0.
20000.	157.	6.	3.	1.	0.	1.	1.	3.	13.	27.	15.	22.	10.	0.
25000.	156.	4.	1.	1.	1.	0.	0.	1.	12.	31.	19.	14.	12.	0.
30000.	154.	3.	2.	1.	0.	0.	0.	1.	11.	32.	19.	18.	13.	1.
35000.	138.	4.	1.	1.	0.	0.	0.	1.	9.	30.	26.	17.	10.	0.
40000.	126.	3.	3.	0.	0.	0.	0.	1.	2.	39.	23.	21.	8.	0.
45000.	111.	3.	0.	0.	0.	0.	0.	0.	8.	39.	31.	15.	5.	0.
50000.	99.	0.	0.	0.	0.	0.	0.	1.	5.	37.	35.	14.	7.	0.
55000.	85.	1.	0.	1.	0.	0.	0.	1.	4.	41.	36.	14.	0.	1.
60000.	77.	3.	3.	0.	0.	0.	0.	3.	8.	21.	49.	12.	3.	0.
65000.	74.	1.	3.	3.	1.	0.	1.	3.	3.	30.	31.	14.	9.	1.
70000.	62.	5.	6.	2.	0.	3.	0.	0.	3.	32.	32.	11.	3.	2.
75000.	54.	2.	6.	9.	2.	0.	0.	0.	13.	33.	20.	9.	6.	0.
80000.	50.	0.	8.	6.	2.	2.	0.	2.	8.	38.	26.	6.	0.	2.
85000.	44.	2.	5.	5.	5.	0.	0.	7.	2.	45.	23.	5.	2.	0.
90000.	41.	0.	5.	5.	0.	2.	0.	0.	2.	49.	32.	0.	5.	0.
95000.	41.	0.	0.	10.	0.	0.	0.	2.	0.	56.	27.	5.	0.	0.
100000.	34.	3.	0.	6.	3.	0.	0.	0.	3.	44.	26.	3.	0.	12.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

DECEMBER

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	WIND DIRECTIONS (DEGREES)												CALM
		≥ 360 < 30	≥ 30 < 60	≥ 60 < 90	≥ 90 < 120	≥ 120 < 150	≥ 150 < 180	≥ 180 < 210	≥ 210 < 240	≥ 240 < 270	≥ 270 < 300	≥ 300 < 330	≥ 330 < 360	
6000.	148.	9.	5.	2.	4.	3.	5.	13.	20.	16.	6.	10.	6.	1.
8000.	149.	7.	3.	2.	1.	1.	6.	5.	17.	21.	13.	13.	10.	0.
10000.	149.	7.	0.	0.	0.	5.	1.	4.	10.	22.	20.	16.	15.	0.
12000.	149.	5.	1.	1.	0.	1.	3.	1.	14.	18.	21.	19.	14.	0.
14000.	149.	6.	1.	1.	0.	4.	0.	3.	17.	17.	21.	19.	10.	0.
15000.	149.	4.	1.	1.	1.	2.	1.	5.	13.	22.	19.	16.	13.	0.
16000.	148.	5.	0.	1.	2.	2.	1.	3.	11.	27.	18.	16.	13.	0.
18000.	147.	5.	0.	1.	2.	2.	1.	3.	12.	27.	18.	16.	13.	0.
20000.	146.	5.	0.	1.	1.	1.	4.	3.	12.	28.	19.	18.	11.	0.
25000.	138.	4.	3.	1.	1.	1.	1.	4.	14.	33.	18.	14.	8.	0.
30000.	134.	4.	1.	1.	1.	0.	0.	1.	20.	35.	16.	11.	10.	0.
35000.	126.	5.	0.	1.	1.	0.	0.	0.	15.	37.	23.	13.	6.	0.
40000.	116.	1.	1.	1.	1.	1.	0.	1.	15.	35.	29.	14.	3.	0.
45000.	107.	0.	0.	0.	0.	0.	0.	3.	10.	31.	41.	11.	4.	0.
50000.	91.	0.	0.	0.	0.	0.	0.	0.	9.	29.	43.	16.	3.	0.
55000.	81.	2.	0.	1.	1.	1.	0.	0.	9.	25.	42.	16.	2.	1.
60000.	73.	3.	1.	0.	0.	0.	0.	4.	8.	27.	32.	15.	8.	0.
65000.	65.	8.	2.	0.	0.	0.	0.	0.	5.	23.	32.	25.	6.	0.
70000.	63.	8.	3.	0.	0.	0.	0.	6.	5.	8.	37.	19.	8.	0.
75000.	61.	3.	3.	5.	5.	0.	0.	0.	5.	20.	36.	16.	7.	0.
80000.	57.	0.	2.	2.	2.	0.	0.	2.	5.	25.	44.	13.	4.	0.
85000.	53.	2.	0.	0.	0.	0.	0.	0.	2.	45.	43.	8.	0.	0.
90000.	52.	0.	0.	0.	0.	0.	0.	0.	4.	60.	35.	2.	0.	0.
95000.	42.	0.	0.	0.	0.	0.	0.	0.	2.	64.	33.	0.	0.	0.
100000.	37.	0.	0.	0.	0.	0.	0.	0.	3.	59.	38.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

JANUARY

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	CALM	WIND SPEED (KNOTS)												WIND SPEED (KNOTS)				WIND SPEED (KNOTS)				WIND SPEED (KNOTS)				WIND SPEED (KNOTS)			
			≥1 <10	≥10 <20	≥20 <30	≥30 <40	≥40 <50	≥50 <60	≥60 <70	≥70 <80	≥80 <90	≥90 <100	≥100 <125	≥125 <150	≥150	≥1 <10	≥10 <20	≥20 <30	≥30 <40	≥40 <50	≥50 <60	≥60 <70	≥70 <80	≥80 <90	≥90 <100	≥100 <125	≥125 <150	≥150		
6000.	118.	2.	58.	31.	8.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
8000.	117.	0.	21.	48.	24.	8.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
10000.	117.	0.	9.	31.	41.	14.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
12000.	116.	0.	9.	18.	38.	26.	6.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
14000.	116.	0.	5.	16.	28.	29.	14.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
15000.	116.	0.	4.	17.	22.	32.	15.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
16000.	116.	0.	4.	14.	16.	34.	20.	8.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
18000.	115.	0.	5.	9.	12.	28.	26.	11.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
20000.	115.	0.	4.	7.	13.	23.	26.	14.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
25000.	115.	0.	3.	7.	8.	16.	18.	21.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
30000.	109.	0.	4.	3.	9.	13.	16.	19.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
35000.	103.	0.	0.	9.	8.	9.	11.	18.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
40000.	102.	0.	2.	4.	7.	7.	11.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
45000.	95.	0.	2.	4.	5.	11.	17.	15.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
50000.	84.	0.	0.	5.	11.	12.	23.	13.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
55000.	69.	0.	4.	12.	16.	12.	23.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
60000.	55.	0.	12.	34.	25.	11.	9.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
65000.	50.	2.	22.	32.	20.	12.	12.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
70000.	44.	0.	45.	23.	11.	20.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
75000.	38.	0.	58.	21.	13.	3.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
80000.	37.	0.	32.	43.	11.	5.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
85000.	35.	0.	31.	43.	14.	3.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
90000.	31.	0.	19.	45.	13.	6.	6.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
95000.	23.	0.	13.	39.	17.	9.	0.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
100000.	15.	0.	7.	27.	20.	13.	20.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JALA)
 PERIOD OF RECORD 1962-1967

FEBRUARY

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	CALM	≥1		≥10		≥20		≥30		≥40		WIND SPEED (KNOTS)		≥80		≥90		≥100	≥125		≥150	
			≥1	<10	≥10	<20	≥20	<30	≥30	<40	≥40	<50	≥50	<60	≥60	<70	≥70	<80		≥80	<90		≥90
6000.	112.	1.	63.	28.	8.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	112.	0.	32.	50.	15.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	111.	0.	19.	44.	30.	6.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	111.	0.	11.	33.	32.	14.	9.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	111.	0.	7.	20.	32.	20.	16.	0.	0.	0.	0.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	110.	0.	4.	13.	31.	26.	15.	0.	0.	0.	0.	5.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	111.	0.	3.	14.	30.	28.	9.	0.	0.	0.	0.	14.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	110.	0.	3.	13.	23.	25.	17.	0.	0.	0.	0.	11.	8.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.
20000.	110.	0.	2.	9.	21.	25.	14.	0.	0.	0.	0.	14.	13.	4.	4.	0.	0.	0.	0.	0.	0.	0.	0.
25000.	107.	0.	1.	7.	12.	15.	20.	0.	0.	0.	0.	15.	9.	9.	9.	0.	0.	0.	0.	0.	0.	0.	0.
30000.	105.	0.	3.	2.	8.	11.	11.	0.	0.	0.	0.	19.	12.	13.	13.	0.	0.	0.	0.	0.	0.	0.	0.
35000.	100.	0.	1.	4.	11.	12.	7.	0.	0.	0.	0.	11.	11.	14.	14.	0.	0.	0.	0.	0.	0.	0.	0.
40000.	93.	0.	2.	0.	6.	16.	11.	0.	0.	0.	0.	15.	14.	11.	11.	0.	0.	0.	0.	0.	0.	0.	0.
45000.	90.	0.	1.	2.	7.	8.	18.	0.	0.	0.	0.	19.	17.	14.	14.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	75.	0.	1.	3.	4.	12.	24.	0.	0.	0.	0.	23.	17.	15.	15.	0.	0.	0.	0.	0.	0.	0.	0.
55000.	64.	0.	3.	6.	17.	11.	39.	0.	0.	0.	0.	13.	5.	3.	3.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	58.	0.	14.	26.	24.	21.	10.	0.	0.	0.	0.	3.	0.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	56.	0.	18.	32.	18.	27.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	54.	0.	28.	41.	22.	9.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	50.	0.	16.	38.	32.	12.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	47.	0.	14.	23.	38.	9.	9.	0.	0.	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	43.	0.	16.	26.	26.	21.	7.	0.	0.	0.	0.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	38.	0.	13.	24.	29.	18.	11.	0.	0.	0.	0.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	30.	0.	17.	23.	10.	27.	17.	0.	0.	0.	0.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	25.	0.	16.	16.	12.	20.	32.	0.	0.	0.	0.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
JALLEH SIYE (JALF)
PERIOD OF RECORD 1962-1967

MARCH

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	CALM	WIND SPEED (KNOTS)												2150													
			≥ 1 < 10	≥ 10 < 20	≥ 20 < 30	≥ 30 < 40	≥ 40 < 50	≥ 50 < 60	≥ 60 < 70	≥ 70 < 80	≥ 80 < 90	≥ 90 < 100	≥ 100 < 125	≥ 125 < 150														
6000.	161.	0.	67.	27.	6.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	161.	0.	40.	48.	10.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	160.	0.	24.	45.	21.	8.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	158.	0.	15.	38.	22.	16.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	158.	0.	11.	30.	20.	17.	19.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	155.	0.	8.	26.	21.	21.	21.	6.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	177.	0.	5.	27.	19.	21.	21.	10.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	158.	1.	1.	22.	22.	21.	21.	13.	4.	1.	1.	4.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20000.	157.	0.	1.	15.	21.	22.	22.	12.	17.	12.	9.	9.	9.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
25000.	152.	1.	1.	7.	19.	16.	16.	9.	17.	9.	14.	8.	14.	5.	14.	5.	5.	5.	5.	5.	5.	2.	2.	0.	0.	0.	0.	0.
30000.	154.	1.	0.	5.	10.	11.	11.	14.	17.	14.	11.	8.	9.	9.	8.	11.	10.	10.	8.	5.	5.	10.	10.	2.	2.	0.	0.	0.
35000.	147.	0.	0.	5.	7.	9.	9.	12.	12.	12.	11.	11.	12.	12.	11.	11.	10.	12.	10.	10.	4.	4.	14.	14.	3.	3.	1.	1.
40000.	145.	0.	1.	2.	6.	14.	14.	10.	12.	10.	13.	13.	12.	10.	10.	13.	10.	12.	10.	10.	6.	6.	10.	10.	3.	3.	1.	1.
45000.	132.	0.	3.	2.	6.	12.	12.	14.	12.	14.	17.	17.	14.	14.	17.	14.	14.	10.	10.	10.	4.	4.	10.	10.	1.	1.	1.	1.
50000.	129.	0.	0.	2.	6.	16.	16.	18.	21.	18.	15.	15.	13.	13.	15.	13.	13.	6.	6.	6.	1.	1.	2.	2.	0.	0.	0.	0.
55000.	112.	1.	1.	7.	7.	24.	24.	21.	13.	21.	9.	9.	4.	4.	9.	4.	4.	2.	2.	2.	1.	1.	1.	1.	0.	0.	0.	0.
60000.	102.	1.	3.	28.	30.	13.	13.	9.	10.	9.	5.	5.	2.	2.	5.	2.	2.	2.	2.	2.	1.	1.	0.	0.	0.	0.	0.	0.
65000.	88.	2.	10.	41.	19.	12.	12.	2.	8.	2.	2.	0.	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	85.	2.	29.	34.	22.	7.	7.	2.	1.	2.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	70.	3.	23.	47.	14.	4.	4.	3.	4.	3.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	57.	2.	25.	40.	18.	4.	4.	2.	5.	2.	2.	2.	2.	2.	0.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	47.	0.	23.	30.	30.	13.	13.	0.	2.	0.	2.	2.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	43.	0.	7.	26.	37.	23.	23.	5.	0.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	39.	0.	10.	18.	28.	28.	28.	0.	13.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	29.	3.	7.	17.	3.	3.	24.	10.	24.	10.	7.	7.	7.	10.	0.	0.	0.	0.	0.	0.	0.	0.	3.	3.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

APRIL

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	CALM	>1		>10		>20		>30		>40		>50		>60		>70		>80		>90		>100		>125		>150		>150	
			<10	<10	<20	<20	<30	<30	<40	<40	<50	<50	<60	<60	<70	<70	<80	<80	<90	<90	<100	<100	<125	<125	<150	<150	<150	<150	<150	<150
6000-	139.	0.	45.	39.	15.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000-	137.	0.	35.	41.	20.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000-	137.	0.	20.	42.	22.	12.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000-	137.	0.	14.	28.	26.	19.	10.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14000-	137.	0.	12.	15.	27.	18.	20.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
15000-	136.	0.	12.	12.	20.	24.	18.	10.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16000-	136.	0.	7.	15.	17.	22.	21.	12.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18000-	137.	0.	3.	13.	16.	20.	20.	16.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20000-	137.	0.	3.	9.	14.	21.	19.	13.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
25000-	136.	0.	1.	11.	6.	10.	20.	18.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30000-	135.	0.	0.	5.	9.	7.	13.	14.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
35000-	129.	0.	0.	3.	7.	6.	9.	12.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40000-	124.	2.	0.	3.	3.	6.	8.	15.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
45000-	115.	1.	0.	1.	6.	11.	11.	10.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000-	109.	2.	0.	3.	10.	9.	13.	28.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
55000-	101.	1.	1.	9.	16.	17.	26.	15.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
60000-	92.	1.	11.	35.	27.	22.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000-	84.	0.	45.	36.	12.	6.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000-	81.	0.	53.	40.	5.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000-	78.	0.	50.	42.	5.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000-	75.	0.	49.	40.	7.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000-	70.	0.	56.	33.	7.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000-	65.	2.	42.	40.	11.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95000-	57.	7.	32.	42.	11.	5.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	41.	2.	15.	39.	22.	12.	7.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

MAY

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	CALM	≥1 <10	≥10 <20	≥20 <30	≥30 <40	≥40 <50	≥50 <60	≥60 <70	≥70 <80	≥80 <90	≥90 <100	≥100 <125	≥125 <150	≥150
6000-	128.	1.	63.	30.	5.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000-	126.	0.	50.	42.	6.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000-	125.	0.	33.	49.	17.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000-	124.	0.	24.	44.	20.	9.	2.	1.	0.	0.	0.	0.	0.	0.	0.
14000-	124.	0.	16.	35.	31.	9.	4.	5.	1.	0.	0.	0.	0.	0.	0.
15000-	121.	0.	14.	31.	31.	12.	5.	4.	2.	1.	0.	0.	0.	0.	0.
16000-	121.	0.	8.	31.	32.	15.	7.	2.	3.	1.	0.	0.	0.	0.	0.
18000-	120.	0.	7.	26.	29.	21.	8.	3.	4.	1.	0.	0.	0.	0.	0.
20000-	120.	0.	7.	25.	22.	23.	12.	6.	1.	2.	2.	0.	0.	0.	0.
25000-	119.	0.	8.	18.	13.	20.	15.	11.	6.	3.	3.	1.	0.	0.	0.
30000-	121.	1.	4.	15.	11.	16.	17.	12.	9.	7.	2.	0.	0.	0.	0.
35000-	114.	0.	4.	8.	14.	9.	11.	20.	8.	10.	2.	2.	2.	0.	0.
40000-	115.	2.	3.	8.	7.	12.	13.	12.	10.	14.	3.	3.	1.	0.	0.
45000-	103.	1.	2.	8.	8.	14.	18.	15.	15.	12.	4.	4.	1.	0.	0.
50000-	100.	0.	0.	9.	16.	21.	26.	10.	12.	3.	1.	1.	0.	0.	0.
55000-	98.	3.	3.	35.	32.	13.	5.	5.	3.	0.	0.	0.	0.	0.	0.
60000-	94.	0.	37.	45.	14.	3.	0.	1.	0.	0.	0.	0.	0.	0.	0.
65000-	91.	2.	63.	32.	2.	1.	6.	0.	0.	0.	0.	0.	0.	0.	0.
70000-	90.	1.	66.	29.	3.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.
75000-	81.	0.	57.	40.	2.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.
80000-	78.	1.	51.	44.	3.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
85000-	73.	0.	49.	44.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000-	71.	1.	44.	45.	7.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.
95000-	64.	5.	41.	44.	9.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	51.	2.	31.	47.	20.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1952-1967

JUNE

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	CALM	≥1 <10	≥10 <20	≥20 <30	≥30 <40	WIND SPEED (KNOTS)								≥100 <125	≥125 <150	≥150
							≥40 <50	≥50 <60	≥60 <70	≥70 <80	≥80 <90	≥90 <100	≥100 <125	≥125 <150			
6000.	127.	1.	61.	32.	6.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	127.	0.	46.	41.	13.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	127.	0.	38.	41.	20.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	128.	0.	32.	36.	25.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	127.	0.	27.	33.	25.	13.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	124.	0.	27.	29.	27.	10.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	126.	0.	21.	30.	27.	13.	9.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	125.	0.	24.	24.	22.	21.	6.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20000.	125.	0.	21.	23.	22.	21.	9.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.
25000.	124.	0.	17.	19.	22.	19.	18.	4.	1.	1.	0.	0.	0.	0.	0.	0.	0.
30000.	120.	0.	8.	12.	27.	16.	17.	16.	2.	1.	1.	0.	0.	0.	0.	0.	0.
35000.	114.	0.	4.	14.	11.	18.	20.	15.	11.	4.	2.	2.	0.	0.	0.	0.	0.
40000.	115.	1.	1.	7.	12.	14.	21.	14.	13.	9.	4.	1.	3.	0.	0.	0.	0.
45000.	112.	0.	2.	4.	13.	19.	19.	21.	10.	8.	2.	0.	0.	0.	0.	0.	0.
50000.	105.	0.	4.	13.	22.	30.	18.	9.	4.	1.	0.	0.	0.	0.	0.	0.	0.
55000.	99.	0.	26.	36.	25.	6.	4.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	97.	0.	36.	52.	11.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	95.	1.	32.	57.	11.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	92.	1.	21.	57.	20.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	89.	0.	11.	45.	38.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	79.	0.	5.	41.	49.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	74.	1.	11.	32.	46.	9.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	66.	0.	9.	36.	30.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	54.	0.	3.	37.	19.	37.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	54.	2.	6.	19.	31.	30.	13.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

JULY

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	CALM	WIND SPEED (KNOTS)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
			≥1 <10	≥10 <20	≥20 <30	≥30 <40	≥40 <50	≥50 <60	≥60 <70	≥70 <80	≥80 <90	≥90 <100	≥100 <125	≥125 <150	≥150																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
6000.	149.	1.	82.	17.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

AUGUST

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	CALM	WIND SPEED (KNOTS)																							
			≥1 <10	≥10 <20	≥20 <30	≥30 <40	≥40 <50	≥50 <60	≥60 <70	≥70 <80	≥80 <90	≥90 <100	≥100 <125	≥125 <150	≥150											
6000.	156.	2.	82.	15.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	156.	0.	76.	22.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	157.	1.	69.	29.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	157.	0.	63.	31.	5.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	157.	0.	51.	46.	2.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	150.	0.	47.	48.	4.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	156.	1.	42.	49.	6.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	156.	0.	46.	45.	8.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20000.	156.	0.	44.	48.	6.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
25000.	149.	0.	36.	44.	19.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30000.	152.	0.	25.	41.	22.	11.	11.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
35000.	144.	1.	15.	33.	27.	15.	15.	7.	10.	5.	1.	2.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40000.	145.	0.	17.	23.	28.	15.	15.	10.	10.	5.	2.	2.	10.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
45000.	134.	0.	12.	42.	18.	13.	13.	8.	8.	2.	0.	0.	8.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	132.	0.	23.	44.	24.	8.	8.	2.	2.	0.	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
55000.	119.	0.	52.	41.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	110.	0.	30.	62.	8.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	96.	0.	12.	65.	23.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	93.	1.	1.	37.	59.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	85.	0.	0.	15.	71.	14.	14.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	80.	3.	0.	5.	58.	33.	33.	3.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	70.	0.	0.	1.	50.	44.	44.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	64.	0.	0.	2.	25.	64.	64.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	60.	2.	0.	0.	5.	60.	60.	2.	32.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	55.	0.	0.	2.	9.	56.	56.	0.	27.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

SEPTEMBER

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	CALM	≥1 <10	≥10 <20	≥20 <30	≥30 <40	≥40 <50	≥50 <60	≥60 <70	≥70 <80	≥80 <90	≥90 <100	≥100 <125	≥125 <150	≥150
6000-	124.	2.	81.	16.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000-	123.	0.	68.	29.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000-	123.	0.	49.	43.	6.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000-	122.	0.	32.	55.	11.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.
14000-	122.	0.	26.	45.	22.	4.	2.	0.	0.	0.	0.	0.	0.	0.	0.
15000-	118.	0.	25.	47.	20.	4.	4.	0.	0.	0.	0.	0.	0.	0.	0.
16000-	122.	0.	25.	47.	20.	4.	4.	0.	0.	0.	0.	0.	0.	0.	0.
18000-	121.	0.	23.	46.	19.	7.	3.	2.	0.	0.	0.	0.	0.	0.	0.
20000-	122.	0.	16.	49.	18.	10.	3.	2.	1.	0.	0.	0.	0.	0.	0.
25000-	116.	0.	9.	32.	32.	15.	6.	3.	1.	2.	0.	0.	0.	0.	0.
30000-	120.	0.	8.	21.	31.	20.	7.	9.	2.	2.	0.	0.	0.	0.	0.
35000-	115.	0.	2.	11.	24.	21.	14.	11.	10.	5.	1.	0.	0.	0.	0.
40000-	114.	1.	0.	8.	13.	23.	18.	16.	14.	5.	1.	0.	0.	0.	0.
45000-	106.	0.	3.	8.	15.	28.	17.	15.	8.	3.	2.	0.	0.	0.	0.
50000-	105.	1.	2.	21.	32.	29.	10.	5.	1.	0.	0.	0.	0.	0.	0.
55000-	92.	0.	35.	43.	15.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.
60000-	83.	0.	52.	46.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000-	77.	0.	43.	55.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000-	75.	0.	33.	56.	9.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000-	73.	0.	29.	47.	23.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000-	72.	0.	14.	64.	15.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000-	70.	0.	21.	47.	23.	9.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000-	66.	0.	24.	41.	23.	12.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95000-	62.	0.	16.	34.	40.	10.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100000-	55.	0.	13.	38.	40.	9.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
JALLEN SITE (JALA)
PERIOD OF RECORD 1962-1967

OCTOBER

GEOMETRIC ALTITUDE MSL FT	TOTAL DBS	CALM	WIND SPEED (KNOTS)												≥150	
			≥1 <10	≥10 <20	≥20 <30	≥30 <40	≥40 <50	≥50 <60	≥60 <70	≥70 <80	≥80 <90	≥90 <100	≥100 <125	≥125 <150		
6000.	145.	1.	80.	17.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	145.	1.	56.	38.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	145.	0.	41.	46.	11.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	145.	0.	32.	39.	19.	9.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	142.	0.	23.	37.	23.	13.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	137.	0.	23.	36.	23.	15.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	141.	0.	22.	34.	23.	16.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	140.	0.	21.	26.	28.	15.	7.	3.	1.	0.	0.	0.	0.	0.	0.	0.
20000.	140.	0.	21.	20.	27.	16.	10.	4.	2.	0.	0.	0.	0.	0.	0.	0.
25000.	136.	0.	13.	20.	21.	17.	11.	10.	4.	1.	0.	0.	0.	0.	0.	0.
30000.	137.	0.	9.	18.	13.	21.	12.	7.	5.	4.	1.	1.	1.	1.	0.	0.
35000.	132.	0.	2.	17.	19.	8.	19.	11.	6.	5.	5.	5.	5.	2.	0.	0.
40000.	131.	0.	5.	15.	15.	11.	20.	11.	2.	2.	8.	7.	1.	5.	0.	0.
45000.	117.	0.	3.	16.	18.	15.	20.	5.	9.	9.	6.	5.	0.	3.	0.	0.
50000.	107.	0.	7.	23.	24.	25.	7.	7.	4.	4.	3.	0.	1.	0.	0.	0.
55000.	94.	1.	16.	46.	21.	9.	2.	3.	0.	0.	0.	2.	0.	0.	0.	0.
60000.	89.	0.	39.	40.	17.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	82.	0.	56.	39.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	79.	0.	63.	33.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	75.	0.	52.	44.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	71.	0.	32.	49.	15.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	57.	0.	30.	37.	19.	14.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	53.	0.	32.	21.	25.	17.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	46.	0.	28.	22.	15.	24.	9.	0.	0.	2.	0.	0.	0.	0.	0.	0.
100000.	33.	3.	12.	18.	18.	24.	18.	6.	0.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

NOVEMBER

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	CALM	WIND SPEED (KNOTS)										≥ 80				≥ 100		≥ 125		≥ 150					
			≥ 1	< 10	≥ 10	< 20	≥ 20	< 30	≥ 30	< 40	≥ 40	< 50	≥ 50	< 60	≥ 60	< 70	≥ 70	< 80	≥ 80	< 90		≥ 90	< 100	≥ 100	< 125	≥ 125
6000.	159.	0.	81.	16.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	160.	0.	47.	41.	9.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	159.	0.	26.	37.	30.	6.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	159.	0.	19.	35.	23.	18.	0.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	160.	0.	15.	26.	26.	19.	0.	10.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	156.	0.	15.	23.	27.	19.	0.	10.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	156.	0.	13.	21.	24.	21.	0.	11.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	157.	0.	9.	20.	25.	22.	0.	9.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20000.	157.	0.	6.	21.	20.	21.	0.	12.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
25000.	156.	0.	3.	15.	17.	19.	0.	21.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30000.	154.	1.	1.	13.	13.	15.	0.	18.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
35000.	138.	0.	1.	7.	14.	12.	0.	16.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40000.	126.	0.	0.	2.	13.	12.	0.	16.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
45000.	111.	0.	1.	2.	14.	16.	0.	16.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	99.	0.	1.	1.	17.	20.	0.	19.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
55000.	85.	1.	4.	13.	32.	21.	0.	18.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	77.	0.	12.	31.	35.	16.	0.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	74.	1.	28.	50.	8.	9.	0.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	62.	2.	31.	39.	16.	10.	0.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	54.	0.	22.	39.	24.	13.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	50.	2.	24.	26.	24.	12.	0.	12.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	44.	0.	11.	34.	25.	7.	0.	11.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	41.	0.	5.	32.	27.	10.	0.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	41.	0.	7.	17.	27.	10.	0.	10.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	34.	12.	6.	3.	18.	15.	0.	12.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

DECEMBER

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	CALM	WIND SPEED (KNOTS)										WIND SPEED (KNOTS)			
			≥1	<10	≥10	≥20	≥30	≥40	≥50	≥60	≥70	≥80	≥90	≥100	≥125	≥150
6000.	148.	1.	67.	22.	8.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	149.	0.	40.	40.	15.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	149.	0.	19.	44.	17.	16.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	149.	0.	15.	32.	26.	14.	11.	3.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	149.	0.	15.	24.	23.	13.	13.	10.	1.	0.	0.	0.	0.	0.	0.	0.
15000.	149.	0.	12.	19.	28.	13.	12.	8.	5.	2.	0.	0.	0.	0.	0.	0.
16000.	148.	0.	9.	22.	26.	16.	7.	13.	4.	3.	0.	1.	0.	0.	0.	0.
18000.	147.	0.	10.	18.	24.	14.	10.	10.	10.	1.	0.	3.	0.	0.	0.	0.
20000.	146.	0.	8.	12.	26.	14.	10.	12.	10.	3.	0.	1.	3.	0.	0.	0.
25000.	138.	0.	5.	13.	17.	13.	17.	9.	3.	5.	0.	8.	7.	4.	0.	0.
30000.	134.	0.	7.	7.	7.	21.	17.	7.	4.	3.	0.	7.	8.	7.	1.	1.
35000.	126.	0.	4.	8.	11.	10.	10.	20.	7.	3.	0.	6.	5.	11.	2.	2.
40000.	116.	0.	1.	7.	11.	12.	14.	19.	7.	8.	0.	6.	3.	9.	3.	0.
45000.	107.	0.	2.	8.	4.	12.	18.	17.	20.	11.	4.	3.	4.	1.	1.	0.
50000.	91.	0.	1.	9.	11.	18.	23.	21.	11.	1.	1.	1.	0.	0.	0.	0.
55000.	81.	1.	4.	10.	30.	26.	15.	7.	6.	0.	0.	0.	0.	0.	0.	0.
60000.	73.	0.	8.	36.	26.	22.	7.	1.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	65.	0.	18.	45.	32.	3.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	63.	0.	32.	52.	11.	3.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	61.	0.	34.	36.	15.	13.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	57.	0.	23.	39.	25.	9.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	53.	0.	19.	25.	23.	21.	6.	2.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	52.	0.	10.	17.	17.	23.	13.	8.	6.	4.	0.	2.	0.	0.	0.	0.
95000.	42.	0.	2.	5.	21.	7.	26.	10.	10.	5.	3.	5.	5.	5.	0.	0.
100000.	37.	0.	0.	3.	16.	5.	11.	27.	11.	3.	0.	5.	3.	8.	3.	0.

UPPER AIR WIND DATA AT SELECTED LEVELS BY SEASONS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

WINTER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	MEAN WIND COMPONENTS (KNOTS)		RESULTANT DIRECTION (DEGREES)	VECTOR MEAN SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
				+N	-S	+E	-W			
6000.	378.	32.	0.	0.0		-3.9	271.	9.	43.	10.
8000.	378.	43.	1.	1.0		-8.5	277.	14.	60.	14.
10000.	377.	54.	1.	3.4		-13.0	284.	19.	70.	17.
12000.	376.	60.	1.	5.0		-16.6	287.	24.	73.	20.
14000.	376.	63.	1.	5.7		-19.9	286.	28.	73.	24.
15000.	375.	76.	2.	5.9		-21.4	285.	30.	73.	26.
16000.	375.	90.	3.	6.0		-22.8	285.	32.	74.	27.
18000.	373.	102.	1.	6.3		-25.1	284.	35.	73.	30.
20000.	371.	104.	2.	6.2		-27.5	283.	39.	72.	33.
25000.	360.	140.	3.	5.2		-34.6	279.	48.	73.	41.
30000.	348.	161.	2.	4.0		-41.0	276.	55.	74.	47.
35000.	329.	174.	2.	3.9		-46.8	275.	60.	79.	48.
40000.	311.	148.	4.	2.0		-51.0	272.	60.	86.	41.
45000.	292.	137.	4.	1.7		-49.6	272.	56.	89.	34.
50000.	250.	100.	7.	2.5		-45.6	273.	50.	91.	28.
55000.	214.	97.	0.	2.0		-34.3	273.	38.	90.	25.
60000.	187.	83.	4.	2.6		-21.1	277.	25.	86.	19.
65000.	171.	78.	0.	2.6		-15.4	279.	20.	80.	16.
70000.	161.	40.	1.	3.0		-9.4	288.	15.	64.	15.
75000.	149.	47.	1.	1.9		-10.1	281.	16.	64.	16.
80000.	141.	73.	1.	0.7		-12.6	273.	19.	66.	19.
85000.	131.	75.	2.	-0.3		-15.6	269.	22.	70.	21.
90000.	121.	86.	4.	-1.6		-20.5	266.	28.	73.	26.
95000.	95.	108.	1.	-4.2		-28.9	262.	36.	80.	33.
100000.	77.	126.	3.	-4.6		-35.7	263.	45.	80.	39.

UPPER AIR WIND DATA AT SELECTED LEVELS BY SEASONS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

SPRING

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	MEAN WIND COMPONENTS (KNOTS)		RESULTANT DIRECTION (DEGREES)	VECTOR MEAN SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIAT. (KNOT)
				+N	-S					
6000-	428-	32-	0-	-3.8	-2.8	217-	5-	9-	50-	10-
8000-	424-	41-	1-	-3.8	-6.8	241-	8-	12-	64-	12-
10000-	422-	54-	1-	-3.6	-11.3	252-	12-	16-	73-	14-
12000-	419-	67-	1-	-3.8	-15.6	256-	16-	21-	77-	18-
14000-	419-	69-	2-	-4.6	-19.7	257-	20-	26-	79-	21-
15000-	412-	73-	2-	-4.8	-21.6	257-	22-	28-	80-	22-
16000-	416-	78-	1-	-5.3	-23.5	257-	24-	30-	81-	23-
18000-	415-	90-	0-	-5.5	-26.7	258-	27-	33-	82-	25-
20000-	414-	99-	2-	-6.1	-28.8	258-	30-	37-	83-	27-
25000-	407-	110-	0-	-7.4	-36.7	259-	37-	45-	83-	33-
30000-	410-	134-	0-	-9.4	-44.3	258-	45-	54-	84-	40-
35000-	390-	160-	4-	-9.3	-52.4	260-	53-	63-	85-	45-
40000-	384-	170-	0-	-9.6	-55.2	260-	56-	68-	89-	41-
45000-	350-	156-	0-	-10.2	-51.0	259-	52-	56-	92-	32-
50000-	338-	116-	0-	-8.7	-46.0	259-	47-	50-	94-	24-
55000-	311-	105-	0-	-5.8	-33.0	260-	33-	37-	91-	22-
60000-	288-	96-	0-	-3.3	-17.3	259-	18-	22-	81-	20-
65000-	263-	83-	0-	-0.7	-8.6	265-	9-	13-	58-	18-
70000-	256-	78-	0-	-1.4	-1.8	232-	2-	12-	18-	15-
75000-	229-	73-	0-	-1.0	-1.8	241-	2-	12-	16-	14-
80000-	210-	73-	0-	-1.9	-2.6	235-	3-	13-	24-	17-
85000-	190-	62-	1-	-2.4	-3.7	237-	4-	13-	33-	16-
90000-	179-	63-	0-	-1.5	-6.8	257-	7-	15-	45-	18-
95000-	160-	86-	0-	-2.3	-9.1	256-	9-	16-	58-	16-
100000-	121-	115-	0-	-3.5	-13.5	255-	14-	21-	67-	23-

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UPPER AIR WIND DATA AT SELECTED LEVELS BY SEASONS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

SUMMER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	MEAN WIND COMPONENTS (KNOTS)			RESULTANT DIRECTION (DEGREES)	VECTOR MEAN SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
				+N	-S	+E	-W				
6000.	432.	31.	0.	-3.0	-0.4	-0.4	187.	3.	7.	44.	8.
8000.	432.	35.	0.	-3.6	-1.8	-1.8	206.	4.	8.	48.	9.
10000.	433.	39.	0.	-2.7	-2.3	-2.3	221.	4.	9.	39.	10.
12000.	434.	45.	0.	-2.2	-2.0	-2.0	223.	3.	10.	29.	12.
14000.	433.	45.	1.	-2.1	-1.4	-1.4	214.	3.	12.	21.	14.
15000.	415.	45.	1.	-2.4	-1.3	-1.3	209.	3.	13.	22.	15.
16000.	431.	45.	0.	-2.6	-1.6	-1.6	212.	3.	13.	23.	16.
18000.	429.	58.	1.	-2.8	-2.3	-2.3	220.	4.	14.	26.	17.
20000.	428.	61.	1.	-3.2	-3.4	-3.4	227.	5.	14.	32.	17.
25000.	412.	71.	1.	-3.5	-6.2	-6.2	240.	7.	17.	43.	19.
30000.	417.	80.	1.	-4.2	-8.7	-8.7	244.	10.	21.	47.	23.
35000.	391.	93.	0.	-4.5	-12.5	-12.5	250.	13.	26.	52.	28.
40000.	397.	116.	0.	-3.8	-15.1	-15.1	256.	16.	29.	53.	32.
45000.	367.	106.	1.	-3.1	-14.4	-14.4	258.	15.	29.	52.	31.
50000.	355.	70.	1.	-3.0	-7.8	-7.8	249.	8.	22.	38.	24.
55000.	322.	56.	1.	-3.4	0.9	0.9	165.	4.	13.	26.	15.
60000.	309.	32.	1.	-3.0	9.3	9.3	108.	10.	13.	74.	11.
65000.	282.	34.	0.	-1.8	14.4	14.4	97.	14.	16.	92.	9.
70000.	274.	41.	0.	-1.5	18.0	18.0	95.	18.	19.	95.	9.
75000.	255.	42.	4.	-0.8	21.9	21.9	92.	22.	22.	98.	8.
80000.	240.	45.	0.	-1.4	24.4	24.4	93.	24.	25.	98.	9.
85000.	216.	43.	0.	-0.4	26.2	26.2	91.	26.	27.	97.	10.
90000.	198.	51.	4.	0.2	29.0	29.0	90.	29.	30.	98.	11.
95000.	178.	52.	0.	-0.6	32.1	32.1	91.	32.	33.	98.	12.
100000.	166.	58.	0.	-2.2	34.4	34.4	94.	34.	35.	98.	13.

UPPER AIR WIND DATA AT SELECTED LEVELS BY SEASONS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

FALL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	MEAN WIND COMPONENTS (KNOTS)		RESULTANT DIRECTION (DEGREES)		VECTOR MEAN SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
				+N	-S	+E	-W				
6000.	428.	31.	0.	-1.4		-1.7	229.	2.	7.	34.	8.
8000.	428.	38.	0.	-1.6		-4.6	251.	5.	10.	49.	11.
10000.	427.	45.	1.	-0.4		-6.7	267.	7.	13.	50.	14.
12000.	426.	49.	1.	1.0		-8.4	277.	8.	16.	51.	17.
14000.	424.	71.	1.	1.9		-9.9	281.	10.	19.	52.	20.
15000.	411.	67.	1.	1.9		-10.7	280.	11.	20.	53.	21.
16000.	419.	70.	1.	2.0		-11.4	280.	12.	21.	54.	22.
18000.	418.	84.	1.	2.5		-13.4	281.	14.	23.	58.	24.
20000.	419.	90.	1.	2.1		-15.3	278.	15.	26.	60.	26.
25000.	408.	110.	1.	2.4		-20.2	277.	20.	32.	63.	32.
30000.	411.	132.	0.	1.9		-25.5	274.	26.	39.	65.	59.
35000.	385.	146.	5.	2.4		-32.2	274.	32.	46.	70.	41.
40000.	371.	144.	0.	3.6		-37.7	275.	38.	49.	77.	40.
45000.	334.	117.	2.	2.5		-36.5	274.	37.	44.	83.	32.
50000.	311.	96.	0.	3.1		-28.0	276.	28.	34.	83.	25.
55000.	271.	89.	0.	2.7		-16.9	279.	17.	22.	79.	20.
60000.	249.	61.	1.	2.0		-7.3	286.	8.	15.	52.	16.
65000.	233.	43.	0.	1.2		-2.6	296.	3.	12.	25.	13.
70000.	216.	41.	0.	1.3		-1.6	309.	2.	12.	18.	14.
75000.	202.	47.	1.	0.3		-0.5	297.	1.	13.	5.	15.
80000.	193.	44.	0.	0.0		-0.4	276.	0.	16.	3.	19.
85000.	171.	63.	1.	-0.3		-2.8	264.	3.	19.	15.	22.
90000.	160.	79.	2.	-1.2		-4.9	256.	5.	21.	24.	25.
95000.	149.	84.	3.	-2.0		-7.7	256.	8.	25.	32.	26.
100000.	122.	94.	0.	-3.7		-9.5	249.	10.	27.	38.	31.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

WINTER

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	WIND DIRECTIONS (DEGREES)										CALM		
		≥ 360 < 30	≥ 30 < 60	≥ 60 < 90	≥ 90 < 120	≥ 120 < 150	≥ 150 < 180	≥ 180 < 210	≥ 210 < 240	≥ 240 < 270	≥ 270 < 300		≥ 300 < 330	≥ 330 < 360
6000.	378.	7.	5.	1.	2.	2.	6.	10.	16.	14.	10.	15.	10.	1.
8000.	378.	7.	3.	2.	2.	1.	4.	5.	14.	16.	20.	16.	9.	0.
10000.	377.	6.	2.	1.	0.	2.	2.	3.	9.	18.	24.	21.	12.	0.
12000.	376.	5.	1.	3.	1.	1.	2.	1.	9.	17.	28.	20.	13.	0.
14000.	376.	5.	2.	3.	1.	2.	0.	2.	10.	18.	30.	18.	11.	0.
15000.	375.	5.	2.	2.	1.	1.	0.	2.	8.	20.	28.	17.	12.	0.
16000.	375.	6.	2.	2.	1.	1.	1.	2.	7.	23.	28.	16.	12.	0.
18000.	373.	6.	2.	2.	1.	1.	1.	2.	8.	24.	28.	17.	10.	0.
20000.	371.	6.	2.	2.	1.	1.	2.	2.	8.	23.	29.	15.	9.	0.
25000.	360.	4.	4.	2.	1.	0.	0.	3.	8.	28.	24.	16.	11.	0.
30000.	348.	5.	3.	2.	1.	0.	0.	1.	11.	31.	25.	12.	9.	0.
35000.	329.	4.	2.	2.	1.	0.	0.	0.	8.	33.	29.	14.	8.	0.
40000.	311.	1.	2.	0.	1.	0.	0.	0.	8.	37.	30.	15.	5.	0.
45000.	292.	1.	1.	0.	0.	0.	0.	1.	6.	39.	34.	15.	3.	0.
50000.	250.	0.	0.	0.	0.	0.	0.	0.	6.	34.	41.	15.	3.	0.
55000.	214.	2.	0.	0.	0.	0.	1.	1.	5.	34.	38.	14.	4.	0.
60000.	187.	2.	2.	1.	1.	1.	1.	2.	5.	30.	33.	17.	6.	0.
65000.	171.	5.	3.	1.	2.	0.	2.	1.	5.	26.	31.	18.	6.	1.
70000.	161.	7.	3.	3.	3.	1.	1.	4.	4.	16.	29.	16.	6.	0.
75000.	149.	6.	5.	9.	3.	1.	1.	1.	3.	26.	29.	13.	5.	0.
80000.	141.	4.	4.	6.	4.	0.	0.	2.	8.	23.	32.	10.	6.	0.
85000.	131.	2.	5.	6.	2.	1.	0.	1.	5.	4.	29.	6.	4.	0.
90000.	121.	2.	2.	6.	1.	0.	1.	3.	6.	42.	28.	4.	4.	0.
95000.	95.	1.	1.	6.	3.	2.	0.	1.	7.	47.	25.	3.	2.	0.
100000.	77.	0.	0.	5.	5.	0.	0.	1.	6.	35.	38.	4.	3.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

SPRING

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	WIND DIRECTIONS (DEGREES)												CALM
		≥ 360 < 30	≥ 30 < 60	≥ 60 < 90	≥ 90 < 120	≥ 120 < 150	≥ 150 < 180	≥ 180 < 210	≥ 210 < 240	≥ 240 < 270	≥ 270 < 300	≥ 300 < 330	≥ 330 < 360	
6000.	428.	5.	5.	3.	2.	4.	16.	19.	16.	9.	6.	7.	7.	0.
8000.	424.	4.	2.	2.	2.	2.	6.	13.	25.	17.	11.	10.	6.	0.
10000.	422.	3.	1.	1.	2.	3.	2.	6.	23.	28.	16.	9.	6.	0.
12000.	419.	4.	1.	1.	1.	2.	1.	5.	20.	32.	20.	8.	4.	0.
14000.	419.	3.	1.	1.	1.	1.	1.	5.	21.	32.	19.	9.	4.	0.
15000.	412.	3.	2.	1.	1.	1.	1.	4.	22.	33.	19.	8.	4.	0.
16000.	416.	2.	3.	1.	0.	1.	1.	4.	20.	36.	19.	9.	4.	0.
18000.	415.	1.	2.	2.	0.	1.	1.	3.	18.	38.	20.	9.	5.	0.
20000.	414.	1.	1.	2.	1.	0.	1.	4.	14.	43.	19.	9.	5.	0.
25000.	407.	2.	1.	2.	0.	0.	1.	2.	17.	43.	20.	9.	3.	0.
30000.	410.	3.	2.	2.	0.	0.	2.	1.	17.	43.	20.	8.	2.	0.
35000.	390.	2.	2.	2.	0.	0.	1.	2.	13.	46.	22.	7.	5.	0.
40000.	384.	2.	1.	1.	0.	1.	0.	2.	11.	50.	22.	5.	3.	1.
45000.	350.	1.	0.	0.	0.	0.	1.	1.	12.	57.	20.	7.	1.	1.
50000.	338.	0.	0.	0.	0.	0.	0.	1.	11.	54.	27.	6.	1.	1.
55000.	311.	0.	0.	0.	1.	0.	0.	3.	14.	46.	27.	6.	1.	2.
60000.	288.	1.	1.	2.	2.	3.	3.	4.	14.	39.	20.	9.	2.	1.
65000.	263.	4.	3.	5.	4.	3.	8.	8.	10.	17.	16.	14.	8.	2.
70000.	256.	4.	5.	14.	12.	7.	7.	5.	8.	18.	9.	5.	4.	1.
75000.	229.	2.	7.	17.	16.	6.	5.	4.	7.	19.	10.	5.	3.	1.
80000.	210.	4.	5.	12.	14.	10.	7.	6.	8.	17.	10.	4.	2.	1.
85000.	190.	3.	2.	8.	17.	5.	6.	8.	13.	22.	9.	4.	4.	0.
90000.	179.	1.	4.	8.	11.	8.	3.	1.	11.	25.	20.	6.	2.	1.
95000.	160.	1.	1.	8.	9.	4.	4.	4.	12.	31.	15.	8.	1.	4.
100000.	121.	0.	3.	4.	10.	6.	2.	3.	12.	33.	17.	7.	1.	2.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

SUMMER

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	WIND DIRECTIONS (DEGREES)												≥ 330 < 360	CALM
		≥ 360 < 30	≥ 30 < 60	≥ 60 < 90	≥ 90 < 120	≥ 120 < 150	≥ 150 < 180	≥ 180 < 210	≥ 210 < 240	≥ 240 < 270	≥ 270 < 300	≥ 300 < 330			
6000.	432.	6.	6.	4.	4.	10.	18.	19.	13.	6.	3.	5.	5.	1.	
8000.	432.	3.	4.	4.	5.	7.	17.	14.	21.	9.	6.	5.	5.	0.	
10000.	433.	4.	7.	4.	6.	8.	10.	12.	16.	15.	6.	6.	6.	0.	
12000.	434.	6.	6.	6.	9.	7.	7.	10.	15.	11.	6.	6.	8.	0.	
14000.	433.	9.	7.	11.	9.	6.	7.	8.	17.	10.	3.	3.	8.	0.	
15000.	415.	7.	11.	9.	9.	8.	7.	8.	15.	12.	3.	3.	8.	0.	
16000.	431.	7.	9.	9.	10.	8.	6.	10.	15.	10.	3.	3.	9.	0.	
18000.	429.	6.	7.	9.	11.	7.	8.	10.	15.	11.	5.	3.	8.	0.	
20000.	428.	5.	7.	10.	8.	8.	5.	12.	15.	13.	4.	5.	7.	0.	
25000.	412.	4.	5.	7.	7.	6.	6.	10.	18.	14.	8.	6.	8.	0.	
30000.	417.	4.	5.	5.	4.	6.	9.	9.	17.	15.	12.	8.	6.	0.	
35000.	391.	4.	4.	3.	6.	6.	8.	6.	20.	15.	9.	13.	6.	1.	
40000.	397.	6.	5.	3.	6.	5.	6.	5.	18.	17.	13.	10.	7.	0.	
45000.	367.	4.	5.	4.	5.	5.	9.	5.	14.	17.	14.	10.	9.	0.	
50000.	555.	8.	6.	5.	6.	7.	5.	7.	14.	15.	12.	7.	7.	0.	
55000.	322.	3.	8.	15.	13.	11.	8.	10.	11.	8.	5.	4.	4.	0.	
60000.	309.	3.	6.	21.	32.	16.	8.	8.	3.	1.	0.	0.	1.	0.	
65000.	282.	0.	2.	32.	45.	13.	2.	2.	0.	1.	0.	0.	0.	0.	
70000.	274.	0.	1.	36.	54.	5.	2.	1.	0.	0.	0.	0.	0.	1.	
75000.	255.	0.	0.	36.	60.	3.	0.	0.	0.	0.	0.	0.	0.	0.	
80000.	240.	0.	1.	33.	60.	5.	0.	0.	0.	0.	0.	0.	0.	1.	
85000.	216.	0.	0.	42.	53.	3.	0.	0.	0.	0.	0.	0.	0.	0.	
90000.	198.	0.	1.	43.	52.	3.	1.	0.	0.	0.	0.	0.	0.	0.	
95000.	178.	1.	2.	38.	57.	2.	1.	0.	0.	0.	0.	0.	0.	1.	
100000.	166.	0.	2.	34.	62.	1.	0.	0.	0.	0.	0.	0.	0.	1.	

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

FALL

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	WIND DIRECTIONS (DEGREES)												CALM
		≥ 360 < 30	≥ 30 < 60	≥ 60 < 90	≥ 90 < 120	≥ 120 < 150	≥ 150 < 180	≥ 180 < 210	≥ 210 < 240	≥ 240 < 270	≥ 270 < 300	≥ 300 < 330	≥ 330 < 360	
6000.	428.	6.	8.	3.	3.	4.	11.	14.	14.	12.	10.	6.	9.	1.
8000.	428.	6.	4.	3.	4.	3.	6.	11.	18.	14.	13.	9.	9.	0.
10000.	427.	6.	5.	4.	3.	2.	5.	8.	17.	14.	15.	12.	9.	0.
12000.	426.	8.	5.	5.	3.	3.	2.	7.	13.	18.	12.	15.	9.	0.
14000.	424.	8.	5.	4.	4.	1.	2.	7.	11.	20.	14.	13.	10.	0.
15000.	411.	8.	6.	4.	3.	1.	1.	8.	12.	20.	14.	12.	10.	0.
16000.	419.	9.	6.	4.	2.	1.	1.	6.	14.	18.	16.	13.	9.	0.
18000.	418.	8.	7.	2.	2.	1.	1.	4.	15.	21.	14.	15.	10.	0.
20000.	419.	10.	5.	2.	2.	1.	2.	3.	14.	23.	13.	17.	8.	0.
25000.	408.	6.	4.	3.	1.	1.	1.	2.	14.	23.	15.	16.	11.	0.
30000.	411.	7.	3.	2.	1.	0.	1.	2.	15.	23.	20.	13.	11.	0.
35000.	385.	4.	2.	2.	0.	1.	0.	2.	13.	25.	23.	17.	8.	0.
40000.	371.	4.	2.	1.	0.	1.	0.	2.	8.	30.	26.	16.	10.	0.
45000.	334.	4.	0.	0.	0.	0.	1.	1.	10.	27.	35.	16.	6.	0.
50000.	311.	1.	1.	0.	0.	0.	1.	2.	9.	28.	30.	17.	10.	0.
55000.	271.	7.	3.	1.	1.	0.	1.	3.	9.	25.	25.	16.	5.	1.
60000.	249.	7.	6.	5.	6.	3.	4.	5.	10.	11.	21.	18.	5.	0.
65000.	233.	3.	6.	9.	13.	5.	5.	3.	5.	15.	16.	9.	11.	0.
70000.	216.	5.	9.	17.	10.	5.	3.	1.	4.	17.	19.	6.	4.	0.
75000.	202.	3.	5.	20.	15.	4.	3.	2.	7.	17.	14.	7.	3.	0.
80000.	193.	1.	7.	24.	16.	4.	1.	3.	4.	19.	17.	4.	3.	1.
85000.	17.	2.	6.	22.	17.	4.	3.	4.	2.	21.	14.	3.	2.	0.
90000.	160.	3.	4.	16.	19.	7.	1.	3.	4.	23.	15.	3.	3.	0.
95000.	149.	1.	2.	17.	21.	4.	1.	3.	1.	28.	18.	2.	1.	0.
100000.	122.	2.	1.	11.	24.	10.	2.	1.	2.	25.	16.	2.	0.	4.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

WINTER

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	CALM	WIND SPEED (KNOTS)															
			≥ 1 < 10	≥ 10 < 20	≥ 20 < 30	≥ 30 < 40	≥ 40 < 50	≥ 50 < 60	≥ 60 < 70	≥ 70 < 80	≥ 80 < 90	≥ 90 < 100	≥ 100 < 125	≥ 125 < 150	≥ 150			
6000.	378.	1.	63.	26.	8.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.			
8000.	378.	0.	31.	45.	18.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.			
10000.	377.	0.	16.	40.	28.	12.	2.	0.	0.	0.	0.	0.	0.	0.	0.			
12000.	376.	0.	12.	28.	31.	18.	9.	0.	0.	0.	0.	0.	0.	0.	0.			
14000.	376.	0.	10.	20.	27.	20.	14.	7.	1.	0.	0.	0.	0.	0.	0.			
15000.	375.	0.	7.	18.	27.	23.	14.	7.	3.	1.	0.	0.	0.	0.	0.			
16000.	375.	0.	6.	17.	24.	25.	11.	12.	2.	2.	1.	0.	0.	0.	0.			
18000.	373.	0.	5.	14.	20.	21.	17.	10.	8.	2.	2.	0.	0.	0.	0.			
20000.	371.	0.	5.	9.	20.	20.	16.	13.	10.	2.	2.	0.	0.	0.	0.			
25000.	360.	0.	3.	9.	13.	14.	18.	14.	8.	6.	7.	3.	0.	0.	0.			
30000.	348.	0.	5.	4.	3.	16.	15.	14.	7.	10.	8.	5.	7.	1.	0.			
35000.	329.	0.	2.	7.	10.	10.	9.	17.	9.	9.	9.	7.	9.	1.	0.			
40000.	311.	0.	2.	4.	8.	11.	12.	19.	11.	9.	7.	8.	7.	2.	0.			
45000.	292.	0.	2.	5.	5.	10.	15.	18.	18.	13.	7.	4.	2.	0.	0.			
50000.	250.	0.	1.	6.	9.	12.	21.	20.	16.	11.	3.	1.	0.	0.	0.			
55000.	214.	0.	4.	10.	21.	17.	25.	11.	6.	4.	1.	1.	0.	0.	0.			
60000.	187.	0.	11.	32.	25.	18.	9.	3.	0.	1.	1.	0.	0.	0.	0.			
65000.	171.	1.	19.	37.	24.	13.	5.	0.	0.	1.	0.	0.	0.	0.	0.			
70000.	161.	0.	34.	40.	15.	10.	1.	0.	0.	0.	0.	0.	0.	0.	0.			
75000.	149.	0.	34.	33.	20.	10.	3.	0.	0.	0.	0.	0.	0.	0.	0.			
80000.	141.	0.	24.	35.	26.	8.	5.	1.	0.	1.	0.	0.	0.	0.	0.			
85000.	131.	0.	21.	30.	21.	16.	5.	5.	1.	1.	0.	0.	0.	0.	0.			
90000.	121.	0.	13.	26.	20.	17.	11.	6.	3.	2.	2.	0.	0.	0.	0.			
95000.	95.	0.	9.	19.	17.	14.	17.	7.	5.	5.	2.	2.	0.	0.	0.			
100000.	77.	0.	6.	12.	16.	12.	19.	14.	5.	3.	3.	4.	5.	1.	0.			

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

SPRING

GEOMETRIC ALTITUDE MSL FT		TOTAL OBS	CALM	WIND SPEED (KNOTS)										≥ 80					≥ 100					≥ 125		≥ 150	
				≥ 1	< 1	≥ 10	< 10	≥ 20	< 20	≥ 30	< 30	≥ 40	< 40	≥ 50	< 50	≥ 60	< 60	≥ 70	< 70	≥ 80	< 80	≥ 90	< 90	≥ 100	< 100		≥ 125
6000.	428.	0.	59.	32.	9.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	424.	0.	42.	44.	12.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	422.	0.	25.	45.	20.	8.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	419.	0.	17.	37.	23.	15.	7.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	419.	0.	13.	26.	26.	15.	15.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	412.	0.	11.	23.	24.	19.	14.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	416.	0.	7.	24.	22.	20.	15.	8.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	415.	0.	3.	20.	22.	21.	15.	11.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20000.	414.	0.	3.	16.	19.	22.	16.	11.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
25000.	407.	0.	3.	12.	14.	15.	17.	13.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30000.	410.	0.	1.	8.	10.	12.	16.	13.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
35000.	390.	0.	1.	5.	9.	8.	11.	14.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40000.	384.	1.	1.	3.	5.	12.	11.	12.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
45000.	350.	1.	2.	4.	7.	13.	14.	13.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	338.	1.	1.	4.	10.	15.	20.	19.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
55000.	311.	2.	2.	16.	22.	18.	15.	14.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	288.	1.	17.	36.	24.	12.	5.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	263.	2.	40.	55.	11.	6.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	256.	1.	50.	34.	10.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	229.	1.	44.	43.	7.	2.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	210.	1.	43.	41.	8.	2.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	190.	0.	45.	36.	12.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	179.	1.	34.	39.	16.	7.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	160.	4.	50.	37.	14.	9.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	121.	2.	20.	37.	17.	10.	8.	3.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

SUMMER

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	CALM	WIND SPEED (KNOTS)											
			≥ 1 < 10	≥ 10 < 20	≥ 20 < 30	≥ 30 < 40	≥ 40 < 50	≥ 50 < 60	≥ 60 < 70	≥ 70 < 80	≥ 80 < 90	≥ 90 < 100	≥ 100 < 125	≥ 125 < 150
6000.	432.	1.	76.	21.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	432.	0.	68.	27.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	433.	0.	62.	31.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	434.	0.	57.	31.	10.	2.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	433.	0.	47.	39.	9.	4.	1.	0.	0.	0.	0.	0.	0.	0.
15000.	415.	0.	42.	41.	11.	3.	2.	0.	0.	0.	0.	0.	0.	0.
16000.	431.	0.	40.	40.	13.	4.	3.	0.	0.	0.	0.	0.	0.	0.
18000.	429.	0.	41.	38.	12.	7.	2.	0.	0.	0.	0.	0.	0.	0.
20000.	428.	0.	39.	40.	10.	7.	3.	0.	0.	0.	0.	0.	0.	0.
25000.	412.	0.	32.	36.	19.	7.	5.	0.	0.	0.	0.	0.	0.	0.
30000.	417.	0.	22.	35.	21.	11.	5.	1.	0.	0.	0.	0.	0.	0.
35000.	391.	1.	15.	30.	21.	15.	9.	3.	1.	1.	0.	0.	0.	0.
40000.	397.	0.	15.	21.	24.	12.	12.	6.	3.	1.	1.	0.	0.	0.
45000.	367.	0.	14.	27.	19.	15.	10.	9.	3.	1.	0.	1.	0.	0.
50000.	355.	0.	17.	34.	23.	14.	7.	3.	1.	0.	0.	0.	0.	0.
55000.	322.	0.	35.	46.	14.	3.	1.	1.	0.	0.	0.	0.	0.	0.
60000.	309.	0.	28.	55.	16.	1.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	282.	0.	16.	57.	25.	2.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	274.	1.	8.	41.	48.	3.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	255.	0.	4.	25.	58.	13.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	240.	1.	2.	17.	52.	27.	2.	0.	0.	0.	0.	0.	0.	0.
85000.	216.	0.	4.	12.	44.	35.	5.	0.	0.	0.	0.	0.	0.	0.
90000.	198.	0.	3.	13.	27.	47.	9.	1.	0.	0.	0.	0.	0.	0.
95000.	178.	1.	1.	12.	12.	48.	22.	3.	0.	0.	0.	0.	0.	0.
100000.	166.	1.	2.	7.	16.	43.	26.	7.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

FALL

GEOMETRIC ALTITUDE MSL FT	TOTAL OBS	CALM	≥ 1		≥ 10		≥ 20		≥ 30		≥ 40		WIND SPEED (KNOTS)										≥ 125		≥ 150	
			≥	<	≥	<	≥	<	≥	<	≥	<	≥	<	≥	<	≥	<	≥	<	≥	<	≥	<	≥	<
6000.	428.	1.	81.	17.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	423.	0.	56.	37.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	427.	0.	37.	42.	16.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	426.	0.	27.	42.	18.	10.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	424.	0.	21.	35.	24.	13.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	411.	0.	21.	34.	24.	13.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	419.	0.	20.	33.	22.	15.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	418.	0.	17.	29.	24.	15.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20000.	419.	0.	14.	29.	22.	16.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
25000.	408.	0.	8.	21.	23.	17.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30000.	411.	0.	6.	17.	18.	18.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
35000.	385.	0.	2.	12.	19.	13.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40000.	371.	0.	2.	9.	14.	15.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
45000.	334.	0.	2.	9.	16.	20.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	311.	0.	3.	15.	25.	25.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
55000.	271.	1.	18.	35.	23.	11.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	249.	0.	35.	39.	18.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	233.	0.	43.	48.	5.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	216.	0.	44.	43.	9.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	202.	0.	36.	44.	16.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	193.	1.	23.	49.	18.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	171.	0.	22.	40.	22.	10.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	160.	0.	22.	32.	24.	13.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	147.	0.	17.	26.	29.	14.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	122.	4.	11.	23.	28.	15.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

SECTION II

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MEAN, MEDIAN AND EXTREME UPPER AIR TEMPERATURES (°CELSIUS)
 AT SELECTED LEVELS BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

JANUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	116.	13.	4.	4.	-6.
8000.	116.	9.	1.	2.	-10.
10000.	117.	6.	-2.	-1.	-14.
12000.	116.	2.	-5.	-4.	-16.
14000.	116.	-1.	-9.	-8.	-20.
15000.	115.	-3.	-11.	-10.	-23.
16000.	116.	-2.	-13.	-12.	-25.
18000.	116.	-9.	-17.	-16.	-30.
20000.	115.	-12.	-22.	-21.	-36.
25000.	115.	-24.	-33.	-33.	-45.
30000.	110.	-37.	-45.	-44.	-53.
35000.	103.	-44.	-53.	-53.	-61.
40000.	102.	-46.	-57.	-58.	-68.
45000.	95.	-51.	-59.	-60.	-71.
50000.	84.	-56.	-63.	-63.	-71.
55000.	69.	-55.	-64.	-65.	-75.
60000.	56.	-59.	-64.	-64.	-72.
65000.	50.	-57.	-62.	-62.	-67.
70000.	44.	-54.	-60.	-60.	-67.
75000.	38.	-53.	-58.	-58.	-63.
80000.	37.	-45.	-57.	-57.	-61.
85000.	35.	-48.	-55.	-56.	-61.
90000.	31.	-48.	-53.	-52.	-60.
95000.	23.	-45.	-51.	-52.	-55.
100000.	15.	-45.	-49.	-49.	-57.

MEAN, MEDIAN AND EXTREME UPPER AIR TEMPERATURES (° CELSIUS)
 AT SELECTED LEVELS BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

FEBRUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	112.	18.	5.	5.	-6.
8000.	112.	12.	1.	1.	-10.
10000.	112.	7.	-3.	-3.	-13.
12000.	112.	3.	-6.	-5.	-17.
14000.	112.	-1.	-10.	-9.	-21.
15000.	111.	-3.	-12.	-11.	-24.
16000.	112.	-4.	-14.	-13.	-26.
18000.	111.	-9.	-18.	-18.	-31.
20000.	111.	-12.	-22.	-22.	-35.
25000.	107.	-24.	-34.	-33.	-47.
30000.	105.	-36.	-45.	-45.	-52.
35000.	100.	-39.	-54.	-55.	-62.
40000.	93.	-45.	-56.	-56.	-67.
45000.	90.	-51.	-58.	-58.	-67.
50000.	74.	-52.	-62.	-62.	-71.
55000.	64.	-56.	-65.	-65.	-73.
60000.	57.	-53.	-65.	-65.	-74.
65000.	55.	-56.	-63.	-63.	-70.
70000.	54.	-54.	-61.	-61.	-69.
75000.	50.	-51.	-58.	-59.	-63.
80000.	47.	-50.	-56.	-56.	-61.
85000.	44.	-48.	-53.	-53.	-58.
90000.	39.	-45.	-51.	-50.	-58.
95000.	30.	-42.	-49.	-49.	-58.
100000.	24.	-42.	-46.	-47.	-50.

MEAN, MEDIAN AND EXTREME UPPER AIR TEMPERATURES (°CELSIUS)
 AT SELECTED LEVELS BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MARCH			
		MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	161.	21.	8.	9.	-9.
8000.	161.	15.	4.	5.	-15.
10000.	160.	10.	-0.	0.	-18.
12000.	159.	6.	-4.	-4.	-24.
14000.	159.	1.	-8.	-7.	-28.
15000.	156.	-2.	-10.	-9.	-29.
16000.	160.	-4.	-12.	-12.	-29.
18000.	159.	-9.	-17.	-15.	-31.
20000.	157.	-13.	-21.	-21.	-36.
25000.	152.	-24.	-32.	-32.	-45.
30000.	154.	-35.	-43.	-44.	-53.
35000.	147.	-44.	-54.	-54.	-61.
40000.	145.	-43.	-58.	-60.	-69.
45000.	132.	-50.	-60.	-60.	-70.
50000.	129.	-51.	-63.	-63.	-71.
55000.	112.	-57.	-64.	-64.	-74.
60000.	102.	-56.	-64.	-64.	-71.
65000.	88.	-56.	-62.	-61.	-66.
70000.	85.	-54.	-59.	-59.	-64.
75000.	69.	-51.	-56.	-56.	-65.
80000.	58.	-49.	-54.	-54.	-57.
85000.	48.	-46.	-52.	-52.	-56.
90000.	44.	-43.	-49.	-50.	-54.
95000.	40.	-41.	-47.	-47.	-52.
100000.	30.	-36.	-44.	-43.	-52.

MEAN, MEDIAN AND EXTREME UPPER AIR TEMPERATURES (° CELSIUS)
 AT SELECTED LEVELS BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

APRIL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	139.	21.	13.	13.	4.
8000.	137.	16.	8.	8.	-2.
10000.	137.	12.	3.	3.	-7.
12000.	137.	7.	-1.	-1.	-12.
14000.	137.	2.	-5.	-5.	-14.
15000.	136.	0.	-7.	-7.	-16.
16000.	136.	-2.	-9.	-9.	-18.
18000.	137.	-7.	-13.	-13.	-23.
20000.	137.	-11.	-18.	-18.	-28.
25000.	136.	-24.	-29.	-29.	-41.
30000.	135.	-35.	-41.	-41.	-46.
35000.	130.	-45.	-52.	-52.	-58.
40000.	124.	-48.	-58.	-59.	-66.
45000.	115.	-52.	-60.	-59.	-70.
50000.	110.	-54.	-63.	-63.	-75.
55000.	103.	-57.	-64.	-64.	-74.
60000.	93.	-57.	-64.	-65.	-71.
65000.	84.	-55.	-61.	-61.	-67.
70000.	82.	-50.	-58.	-58.	-63.
75000.	78.	-50.	-55.	-55.	-60.
80000.	75.	-41.	-52.	-52.	-59.
85000.	70.	-45.	-50.	-49.	-55.
90000.	64.	-41.	-47.	-47.	-52.
95000.	57.	-39.	-44.	-44.	-50.
100000.	41.	-36.	-41.	-41.	-50.

MEAN, MEDIAN AND EXTREME UPPER AIR TEMPERATURES (°CELSIUS)
 AT SELECTED LEVELS BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

MAY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	128.	27.	18.	18.	5.
8000.	127.	21.	13.	13.	-1.
10000.	126.	15.	8.	9.	-6.
12000.	125.	10.	3.	4.	-11.
14000.	125.	6.	-2.	-1.	-13.
15000.	122.	3.	-4.	-3.	-15.
16000.	122.	1.	-6.	-6.	-16.
18000.	121.	-4.	-10.	-10.	-21.
20000.	121.	-8.	-15.	-14.	-26.
25000.	119.	-20.	-26.	-26.	-32.
30000.	121.	-30.	-37.	-38.	-45.
35000.	114.	-42.	-49.	-48.	-55.
40000.	115.	-46.	-58.	-58.	-64.
45000.	103.	-55.	-62.	-61.	-68.
50000.	100.	-57.	-63.	-63.	-70.
55000.	98.	-58.	-64.	-65.	-71.
60000.	94.	-57.	-65.	-65.	-70.
65000.	91.	-56.	-61.	-61.	-68.
70000.	90.	-53.	-57.	-57.	-63.
75000.	81.	-49.	-54.	-54.	-60.
80000.	78.	-47.	-51.	-51.	-56.
85000.	73.	-44.	-48.	-48.	-54.
90000.	71.	-41.	-46.	-46.	-50.
95000.	63.	-36.	-43.	-43.	-48.
100000.	50.	-36.	-40.	-41.	-46.

MEAN, MEDIAN AND EXTREME UPPER AIR TEMPERATURES (°CELSIUS)
 AT SELECTED LEVELS BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

JUNE

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	128.	31.	21.	21.	9.
8000.	126.	24.	17.	17.	5.
10000.	126.	19.	12.	12.	2.
12000.	126.	12.	7.	7.	-1.
14000.	125.	7.	2.	2.	-5.
15000.	122.	4.	-0.	-0.	-7.
16000.	124.	1.	-2.	-2.	-9.
18000.	123.	-3.	-7.	-7.	-12.
20000.	123.	-5.	-11.	-11.	-18.
25000.	122.	-13.	-22.	-22.	-29.
30000.	118.	-27.	-33.	-33.	-42.
35000.	111.	-37.	-44.	-44.	-51.
40000.	114.	-48.	-54.	-54.	-64.
45000.	110.	-55.	-61.	-62.	-68.
50000.	104.	-58.	-67.	-67.	-73.
55000.	98.	-62.	-68.	-68.	-75.
60000.	96.	-57.	-64.	-64.	-69.
65000.	94.	-57.	-60.	-60.	-64.
70000.	91.	-54.	-57.	-57.	-60.
75000.	88.	-51.	-54.	-54.	-57.
80000.	78.	-47.	-51.	-51.	-55.
85000.	73.	-44.	-48.	-48.	-51.
90000.	65.	-41.	-45.	-45.	-50.
95000.	58.	-39.	-43.	-43.	-48.
100000.	53.	-36.	-40.	-40.	-45.

MEAN, MEDIAN AND EXTREME UPPER AIR TEMPERATURES (° CELSIUS)
 AT SELECTED LEVELS BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

JULY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	149.	30.	22.	22.	14.
8000.	148.	24.	18.	18.	11.
10000.	150.	19.	13.	13.	7.
12000.	150.	13.	9.	9.	1.
14000.	150.	8.	4.	4.	-1.
15000.	141.	5.	2.	2.	-3.
16000.	149.	3.	0.	0.	-5.
18000.	146.	-1.	-4.	-4.	-9.
20000.	146.	-5.	-8.	-8.	-12.
25000.	139.	-14.	-17.	-17.	-21.
30000.	145.	-23.	-28.	-28.	-32.
35000.	132.	-35.	-40.	-40.	-45.
40000.	137.	-48.	-52.	-52.	-56.
45000.	121.	-60.	-63.	-63.	-67.
50000.	117.	-65.	-71.	-71.	-74.
55000.	103.	-67.	-71.	-71.	-77.
60000.	102.	-61.	-66.	-66.	-70.
65000.	90.	-56.	-61.	-61.	-65.
70000.	89.	-53.	-56.	-56.	-60.
75000.	79.	-50.	-54.	-54.	-57.
80000.	81.	-48.	-51.	-51.	-55.
85000.	70.	-44.	-49.	-49.	-54.
90000.	69.	-41.	-46.	-46.	-52.
95000.	57.	-40.	-44.	-43.	-50.
100000.	57.	-36.	-41.	-41.	-47.

MEAN, MEDIAN AND EXTREME UPPER AIR TEMPERATURES (°CELSIUS)
 AT SELECTED LEVELS BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	AUGUST			
		MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	157.	30.	22.	21.	13.
8000.	157.	24.	17.	17.	10.
10000.	157.	18.	13.	12.	5.
12000.	157.	13.	8.	8.	2.
14000.	157.	8.	3.	3.	-1.
15000.	151.	6.	1.	1.	-3.
16000.	156.	3.	-1.	-1.	-4.
18000.	156.	-2.	-5.	-5.	-9.
20000.	156.	-5.	-9.	-9.	-12.
25000.	149.	-13.	-18.	-18.	-22.
30000.	152.	-25.	-29.	-29.	-34.
35000.	144.	-36.	-41.	-41.	-46.
40000.	145.	-49.	-52.	-52.	-55.
45000.	134.	-55.	-62.	-62.	-66.
50000.	132.	-62.	-69.	-69.	-74.
55000.	119.	-62.	-70.	-69.	-76.
60000.	110.	-59.	-64.	-64.	-68.
65000.	96.	-57.	-60.	-60.	-65.
70000.	93.	-53.	-57.	-57.	-60.
75000.	85.	-51.	-54.	-54.	-58.
80000.	80.	-47.	-51.	-51.	-56.
85000.	69.	-46.	-49.	-49.	-52.
90000.	63.	-42.	-46.	-46.	-51.
95000.	60.	-39.	-44.	-44.	-49.
100000.	55.	-37.	-41.	-41.	-48.

MEAN, MEDIAN AND EXTREME UPPER AIR TEMPERATURES (°CELSIUS)
 AT SELECTED LEVELS BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

SEPTEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	122.	25.	18.	19.	10.
8000.	123.	19.	14.	14.	6.
10000.	123.	14.	10.	10.	1.
12000.	121.	10.	5.	5.	-4.
14000.	121.	5.	1.	1.	-7.
15000.	117.	3.	-1.	-1.	-9.
16000.	121.	2.	-3.	-3.	-11.
18000.	120.	-1.	-6.	-6.	-16.
20000.	122.	-5.	-10.	-9.	-21.
25000.	116.	-15.	-20.	-20.	-34.
30000.	120.	-25.	-32.	-31.	-44.
35000.	115.	-34.	-43.	-42.	-49.
40000.	114.	-46.	-53.	-53.	-61.
45000.	106.	-54.	-62.	-62.	-66.
50000.	105.	-59.	-69.	-69.	-74.
55000.	92.	-59.	-70.	-70.	-76.
60000.	83.	-58.	-65.	-65.	-71.
65000.	76.	-55.	-61.	-61.	-66.
70000.	73.	-53.	-57.	-57.	-63.
75000.	73.	-49.	-55.	-55.	-60.
80000.	71.	-47.	-52.	-52.	-57.
85000.	70.	-41.	-49.	-49.	-54.
90000.	66.	-39.	-47.	-47.	-51.
95000.	62.	-41.	-45.	-45.	-50.
100000.	55.	-38.	-43.	-42.	-47.

MEAN, MEDIAN AND EXTREME UPPER AIR TEMPERATURES (°CELSIUS)
 AT SELECTED LEVELS BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

OCTOBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	144.	23.	14.	14.	3.
8000.	144.	18.	10.	11.	-2.
10000.	145.	14.	6.	7.	-9.
12000.	145.	9.	3.	3.	-12.
14000.	142.	5.	-1.	-1.	-18.
15000.	139.	3.	-3.	-3.	-18.
16000.	142.	1.	-5.	-5.	-18.
18000.	141.	-4.	-9.	-9.	-20.
20000.	141.	-7.	-13.	-13.	-24.
25000.	137.	-18.	-24.	-25.	-31.
30000.	138.	-28.	-36.	-37.	-42.
35000.	133.	-40.	-47.	-47.	-55.
40000.	132.	-50.	-56.	-56.	-64.
45000.	117.	-57.	-63.	-62.	-72.
50000.	108.	-60.	-67.	-67.	-74.
55000.	94.	-60.	-69.	-69.	-75.
60000.	89.	-61.	-66.	-67.	-71.
65000.	82.	-56.	-62.	-62.	-67.
70000.	80.	-54.	-59.	-59.	-63.
75000.	75.	-51.	-55.	-55.	-59.
80000.	71.	-49.	-53.	-53.	-58.
85000.	57.	-46.	-50.	-50.	-54.
90000.	52.	-44.	-48.	-48.	-55.
95000.	46.	-44.	-47.	-47.	-54.
100000.	33.	-43.	-46.	-46.	-51.

MEAN, MEDIAN AND EXTREME UPPER AIR TEMPERATURES (°CELSIUS)
 AT SELECTED LEVELS BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	NOVEMBER			
		MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	159.	18.	10.	11.	-1.
8000.	160.	18.	7.	7.	-3.
10000.	159.	10.	4.	4.	-8.
12000.	159.	8.	0.	0.	-12.
14000.	160.	3.	-3.	-3.	-16.
15000.	157.	1.	-5.	-4.	-18.
16000.	157.	-1.	-7.	-6.	-20.
18000.	158.	-4.	-11.	-11.	-24.
20000.	158.	-8.	-15.	-16.	-28.
25000.	156.	-19.	-26.	-26.	-41.
30000.	154.	-31.	-38.	-37.	-45.
35000.	138.	-40.	-49.	-49.	-55.
40000.	126.	-46.	-58.	-59.	-67.
45000.	111.	-54.	-64.	-64.	-72.
50000.	101.	-57.	-67.	-67.	-76.
55000.	86.	-62.	-68.	-68.	-78.
60000.	78.	-61.	-67.	-67.	-72.
65000.	74.	-57.	-64.	-64.	-69.
70000.	62.	-56.	-61.	-61.	-65.
75000.	54.	-52.	-58.	-58.	-62.
80000.	50.	-50.	-55.	-56.	-60.
85000.	44.	-47.	-53.	-52.	-59.
90000.	41.	-46.	-51.	-50.	-56.
95000.	41.	-44.	-49.	-49.	-54.
100000.	34.	-41.	-46.	-46.	-53.

MEAN, MEDIAN AND EXTREME UPPER AIR TEMPERATURES (CELSIUS)
 AT SELECTED LEVELS BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

DECEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	148.	15.	6.	6.	-5.
8000.	149.	9.	2.	3.	-10.
10000.	149.	7.	-1.	-0.	-16.
12000.	149.	6.	-4.	-4.	-19.
14000.	149.	2.	-7.	-7.	-23.
15000.	149.	-0.	-9.	-9.	-26.
16000.	148.	-3.	-11.	-10.	-22.
18000.	147.	-7.	-15.	-14.	-25.
20000.	146.	-11.	-19.	-19.	-30.
25000.	138.	-20.	-31.	-31.	-42.
30000.	134.	-34.	-42.	-42.	-49.
35000.	126.	-41.	-52.	-52.	-59.
40000.	119.	-49.	-58.	-58.	-68.
45000.	107.	-52.	-62.	-62.	-73.
50000.	92.	-57.	-65.	-64.	-75.
55000.	81.	-58.	-66.	-66.	-76.
60000.	73.	-58.	-66.	-66.	-71.
65000.	65.	-56.	-64.	-64.	-68.
70000.	63.	-55.	-62.	-62.	-66.
75000.	61.	-52.	-60.	-60.	-64.
80000.	57.	-51.	-56.	-58.	-62.
85000.	53.	-52.	-56.	-56.	-60.
90000.	52.	-49.	-54.	-54.	-59.
95000.	42.	-47.	-51.	-51.	-58.
100000.	37.	-43.	-49.	-49.	-57.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

JANUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	TEMPERATURE ° CELSIUS											
		< -30	≥ -30 < -25	≥ -25 < -20	≥ -20 < -15	≥ -15 < -10	≥ -10 < -5	≥ -5 < 0	≥ 0 < 5	≥ 5 < 10	≥ 10 < 15	≥ 15 < 20	≥ 20 < 25
5000.	116.	0.	0.	0.	0.	0.	1.	22.	36.	30.	10.	0.	0.
8000.	116.	0.	0.	0.	0.	0.	15.	28.	34.	22.	0.	0.	0.
10000.	117.	0.	0.	0.	0.	9.	16.	36.	36.	3.	0.	0.	0.
12000.	116.	0.	0.	0.	6.	14.	23.	45.	12.	0.	0.	0.	0.
14000.	116.	0.	0.	2.	13.	19.	47.	19.	0.	0.	0.	0.	0.
15000.	115.	0.	0.	3.	17.	25.	49.	5.	0.	0.	0.	0.	0.
16000.	116.	0.	0.	0.	0.	0.	0.	1.	10.	19.	36.	32.	0.
18000.	116.	0.	0.	0.	0.	0.	1.	9.	19.	31.	38.	3.	0.
20000.	115.	0.	0.	0.	1.	1.	5.	20.	31.	37.	5.	0.	0.
25000.	115.	0.	0.	1.	27.	27.	37.	24.	2.	0.	0.	0.	0.
30000.	110.	0.	9.	35.	45.	10.	0.	0.	0.	0.	0.	0.	0.
		< -55	≥ -55 < -50	≥ -50 < -45	≥ -45 < -40	≥ -40 < -35	≥ -35 < -30	≥ -30 < -25	≥ -25 < -20	≥ -20 < -15	≥ -15 < -10	≥ -10 < -5	≥ 0
16000.	116.	0.	0.	0.	0.	0.	0.	1.	10.	19.	36.	32.	0.
18000.	116.	0.	0.	0.	0.	0.	1.	9.	19.	31.	38.	3.	0.
20000.	115.	0.	0.	0.	1.	1.	5.	20.	31.	37.	5.	0.	0.
25000.	115.	0.	0.	1.	27.	27.	37.	24.	2.	0.	0.	0.	0.
30000.	110.	0.	9.	35.	45.	10.	0.	0.	0.	0.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS												
		>-85	>-80	>-75	>-70	>-65	>-60	>-55	>-50	>-45	>-40	>-35	>-30
35000.	103.	0.	0.	0.	0.	0.	31.	45.	20.	3.	0.	0.	0.
40000.	102.	0.	0.	0.	4.	31.	26.	25.	14.	0.	0.	0.	0.
45000.	95.	0.	0.	2.	5.	39.	38.	16.	0.	0.	0.	0.	0.
50000.	84.	0.	0.	1.	24.	61.	14.	0.	0.	0.	0.	0.	0.
55000.	69.	0.	0.	6.	41.	39.	13.	1.	0.	0.	0.	0.	0.
60000.	56.	0.	0.	2.	36.	55.	7.	0.	0.	0.	0.	0.	0.
65000.	50.	0.	0.	0.	22.	56.	22.	0.	0.	0.	0.	0.	0.
70000.	44.	0.	0.	0.	5.	50.	39.	7.	0.	0.	0.	0.	0.
75000.	38.	0.	0.	0.	0.	24.	63.	13.	0.	0.	0.	0.	0.
80000.	37.	0.	0.	0.	0.	14.	59.	24.	3.	0.	0.	0.	0.
85000.	35.	0.	0.	0.	0.	6.	51.	37.	6.	0.	0.	0.	0.
90000.	31.	0.	0.	0.	0.	0.	19.	58.	23.	0.	0.	0.	0.
95000.	23.	0.	0.	0.	0.	0.	9.	52.	35.	4.	0.	0.	0.
100000.	15.	0.	0.	0.	0.	0.	7.	33.	53.	7.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

FEBRUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	TEMPERATURE °CELSIUS											
		< -30	≥ -30 < -25	≥ -25 < -20	≥ -20 < -15	≥ -15 < -10	≥ -10 < -5	≥ -5 < 0	≥ 0 < 5	≥ 5 < 10	≥ 10 < 15	≥ 15 < 20	≥ 20 < 25
6000.	112.	0.	0.	0.	0.	0.	1.	14.	36.	29.	18.	3.	0.
8000.	112.	0.	0.	0.	0.	0.	13.	26.	34.	25.	3.	0.	0.
10000.	112.	0.	0.	0.	0.	7.	23.	36.	29.	4.	0.	0.	0.
12000.	112.	0.	0.	0.	5.	15.	31.	40.	8.	0.	0.	0.	0.
14000.	112.	0.	0.	2.	13.	27.	45.	13.	0.	0.	0.	0.	0.
15000.	111.	0.	0.	6.	20.	33.	34.	6.	0.	0.	0.	0.	0.
16000.	112.	0.	0.	0.	0.	0.	0.	1.	9.	25.	44.	21.	0.
18000.	111.	0.	0.	0.	0.	0.	1.	5.	23.	44.	26.	1.	0.
20000.	111.	0.	0.	0.	1.	3.	20.	43.	43.	32.	2.	0.	0.
25000.	107.	0.	0.	2.	32.	42.	18.	2.	2.	0.	0.	0.	0.
30000.	105.	0.	8.	41.	10.	0.	0.	0.	0.	0.	0.	0.	0.
		< -55	≥ -55 < -50	≥ -50 < -45	≥ -45 < -40	≥ -40 < -35	≥ -35 < -30	≥ -30 < -25	≥ -25 < -20	≥ -20 < -15	≥ -15 < -10	≥ -10 < -5	≥ -5 < 0
16000.	112.	0.	0.	0.	0.	0.	0.	1.	9.	25.	44.	21.	0.
18000.	111.	0.	0.	0.	0.	0.	1.	5.	23.	44.	26.	1.	0.
20000.	111.	0.	0.	0.	0.	1.	3.	20.	43.	32.	2.	0.	0.
25000.	107.	0.	0.	2.	32.	42.	18.	2.	2.	0.	0.	0.	0.
30000.	105.	0.	8.	41.	10.	0.	0.	0.	0.	0.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS												
		>-85 <-85	>-80 <-75	>-75 <-70	>-70 <-65	>-65 <-60	>-60 <-55	>-55 <-50	>-50 <-45	>-45 <-40	>-40 <-35	>-35 <-30	>-30
35000.	100.	0.	0.	0.	0.	7.	43.	39.	9.	0.	1.	0.	0.
40000.	93.	0.	0.	0.	8.	15.	34.	29.	13.	1.	0.	0.	0.
45000.	90.	0.	0.	0.	4.	22.	57.	17.	0.	0.	0.	0.	0.
50000.	74.	0.	0.	4.	18.	57.	16.	5.	0.	0.	0.	0.	0.
55000.	64.	0.	0.	8.	39.	41.	13.	0.	0.	0.	0.	0.	0.
60000.	57.	0.	0.	18.	37.	33.	9.	4.	0.	0.	0.	0.	0.
65000.	55.	0.	0.	4.	27.	51.	18.	0.	0.	0.	0.	0.	0.
70000.	54.	0.	0.	0.	11.	48.	37.	4.	0.	0.	0.	0.	0.
75000.	50.	0.	0.	0.	0.	20.	72.	8.	0.	0.	0.	0.	0.
80000.	47.	0.	0.	0.	0.	2.	66.	32.	0.	0.	0.	0.	0.
85000.	44.	0.	0.	0.	0.	0.	18.	70.	11.	0.	0.	0.	0.
90000.	39.	0.	0.	0.	0.	0.	5.	51.	41.	3.	0.	0.	0.
95000.	30.	0.	0.	0.	0.	0.	3.	27.	63.	7.	0.	0.	0.
100000.	24.	0.	0.	0.	0.	0.	0.	0.	71.	29.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

MARCH

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	TEMPERATURE ° CELSIUS													
		< -30	≥ -30 < -25	≥ -25 < -20	≥ -20 < -15	≥ -15 < -10	≥ -10 < -5	≥ -5 < 0	≥ 0 < 5	≥ 5 < 10	≥ 10 < 15	≥ 15 < 20	≥ 20 < 25	≥ 25	
6000.	161.	0.	0.	0.	0.	0.	3.	7.	14.	30.	31.	14.	1.	0.	
8000.	161.	0.	0.	0.	0.	3.	4.	13.	29.	34.	17.	1.	0.	0.	
10000.	160.	0.	0.	0.	2.	3.	13.	29.	37.	16.	0.	0.	0.	0.	
12000.	159.	0.	0.	1.	2.	11.	23.	44.	18.	1.	0.	0.	0.	0.	
14000.	159.	0.	1.	1.	8.	18.	48.	22.	2.	0.	0.	0.	0.	0.	
15000.	156.	0.	1.	3.	13.	28.	45.	11.	0.	0.	0.	0.	0.	0.	

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	< -85	≥ -85 < -80	≥ -80 < -75	≥ -75 < -70	≥ -70 < -65	≥ -65 < -60	≥ -60 < -55	≥ -55 < -50	≥ -50 < -45	≥ -45 < -40	≥ -40 < -35	≥ -35 < -30
35000.	147.	0.	0.	0.	0.	0.	3.	39.	44.	12.	3.	0.	0.
40000.	145.	0.	0.	0.	0.	8.	40.	19.	26.	6.	1.	0.	0.
45000.	132.	0.	0.	0.	0.	7.	36.	49.	7.	1.	0.	0.	0.
50000.	129.	0.	0.	0.	1.	26.	57.	15.	2.	0.	0.	0.	0.
55000.	112.	0.	0.	0.	4.	31.	57.	7.	0.	0.	0.	0.	0.
60000.	102.	0.	0.	0.	1.	28.	62.	9.	0.	0.	0.	0.	0.
65000.	88.	0.	0.	0.	0.	2.	83.	15.	0.	0.	0.	0.	0.
70000.	85.	0.	0.	0.	0.	0.	28.	71.	1.	0.	0.	0.	0.
75000.	69.	0.	0.	0.	0.	0.	4.	64.	32.	0.	0.	0.	0.
80000.	59.	0.	0.	0.	0.	0.	0.	26.	71.	3.	0.	0.	0.
85000.	48.	0.	0.	0.	0.	0.	0.	6.	75.	19.	0.	0.	0.
90000.	44.	0.	0.	0.	0.	0.	0.	0.	43.	52.	5.	0.	0.
95000.	40.	0.	0.	0.	0.	0.	0.	0.	17.	45.	38.	0.	0.
100000.	30.	0.	0.	0.	0.	0.	0.	0.	3.	40.	37.	20.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

APRIL

TEMPERATURE °CELSIUS

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	TEMPERATURE °CELSIUS													
		< -25	≥ -25 < -20	≥ -20 < -15	≥ -15 < -10	≥ -10 < -5	≥ -5 < 0	≥ 0 < 5	≥ 5 < 10	≥ 10 < 15	≥ 15 < 20	≥ 20 < 25	≥ 25 < 30	≥ 30	
6000.	139.	0.	0.	0.	0.	0.	0.	2.	19.	47.	29.	4.	0.	0.	
8000.	137.	0.	0.	0.	0.	0.	1.	15.	53.	28.	2.	0.	0.	0.	
10000.	137.	0.	0.	0.	0.	2.	12.	51.	31.	3.	0.	0.	0.	0.	
12000.	137.	0.	0.	0.	1.	9.	50.	39.	1.	0.	0.	0.	0.	0.	
14000.	137.	0.	0.	0.	7.	42.	47.	5.	0.	0.	0.	0.	0.	0.	
15000.	136.	0.	0.	1.	12.	55.	31.	1.	0.	0.	0.	0.	0.	0.	

16000.	136.	0.	0.	0.	0.	0.	0.	0.	0.	3.	32.	55.	10.	0.
18000.	137.	0.	0.	0.	0.	0.	0.	0.	3.	21.	61.	15.	0.	0.
20000.	137.	0.	0.	0.	0.	0.	0.	3.	10.	68.	19.	0.	0.	0.
25000.	136.	0.	0.	0.	1.	1.	34.	55.	8.	0.	0.	0.	0.	0.
30000.	135.	0.	0.	4.	53.	42.	1.	0.	0.	0.	0.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	< -80	≥ -80 < -75	≥ -75 < -70	≥ -70 < -65	≥ -65 < -60	≥ -60 < -55	≥ -55 < -50	≥ -50 < -45	≥ -45 < -40	≥ -40 < -35	≥ -35 < -30	≥ -30 < -25
35000.	130.	0.	0.	0.	0.	0.	10.	71.	18.	1.	0.	0.	0.
40000.	124.	0.	0.	0.	3.	35.	40.	27.	4.	0.	0.	0.	0.
45000.	115.	0.	0.	1.	8.	30.	57.	4.	0.	0.	0.	0.	0.
50000.	110.	0.	1.	3.	21.	52.	23.	1.	0.	0.	0.	0.	0.
55000.	103.	0.	0.	9.	28.	55.	8.	0.	0.	0.	0.	0.	0.
60000.	93.	0.	0.	1.	46.	48.	4.	0.	0.	0.	0.	0.	0.
65000.	84.	0.	0.	0.	7.	63.	30.	0.	0.	0.	0.	0.	0.
70000.	82.	0.	0.	0.	0.	16.	72.	12.	0.	0.	0.	0.	0.
75000.	78.	0.	0.	0.	0.	1.	46.	51.	1.	0.	0.	0.	0.
80000.	75.	0.	0.	0.	0.	0.	12.	68.	20.	0.	0.	0.	0.
85000.	70.	0.	0.	0.	0.	0.	1.	40.	57.	1.	0.	0.	0.
90000.	64.	0.	0.	0.	0.	0.	0.	14.	61.	25.	0.	0.	0.
95000.	57.	0.	0.	0.	0.	0.	0.	0.	32.	65.	4.	0.	0.
100000.	41.	0.	0.	0.	0.	0.	0.	0.	12.	49.	39.	0.	0.

MAY

80

GEOMETRIC
ALTITUDE
MSL FEET

TOTAL OBS	< -80	≥ -80 < -75	≥ -75 < -70	≥ -70 < -65	≥ -65 < -60	≥ -60 < -55	≥ -55 < -50	≥ -50 < -45	≥ -45 < -40	≥ -40 < -35	≥ -35 < -30	≥ -30 < -25
35000.	0.	0.	0.	0.	0.	2.	28.	61.	9.	0.	0.	0.
40000.	0.	0.	0.	27.	59.	12.	12.	2.	0.	0.	0.	0.
45000.	0.	0.	0.	50.	30.	30.	1.	0.	0.	0.	0.	0.
50000.	0.	0.	1.	75.	11.	11.	0.	0.	0.	0.	0.	0.
55000.	0.	0.	3.	50.	6.	6.	0.	0.	0.	0.	0.	0.
60000.	0.	0.	2.	50.	1.	1.	0.	0.	0.	0.	0.	0.
65000.	0.	0.	0.	51.	40.	40.	0.	0.	0.	0.	0.	0.
70000.	0.	0.	0.	10.	72.	18.	0.	0.	0.	0.	0.	0.
75000.	0.	0.	0.	0.	30.	65.	5.	5.	0.	0.	0.	0.
80000.	0.	0.	0.	0.	3.	73.	24.	24.	0.	0.	0.	0.
85000.	0.	0.	0.	0.	0.	22.	75.	75.	3.	0.	0.	0.
90000.	0.	0.	0.	0.	0.	1.	63.	35.	35.	0.	0.	0.
95000.	0.	0.	0.	0.	0.	0.	16.	75.	75.	10.	0.	0.
100000.	0.	0.	0.	0.	0.	0.	2.	56.	56.	42.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

JUNE

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	TEMPERATURE °CELSIUS														
		< -15	≥ -15	< -10	≥ -10	< -5	≥ -5	< 0	≥ 0	< 5	≥ 5	< 10	≥ 10	< 15	≥ 15	≥ 20
6000.	128.	0.	0.	0.	0.	0.	0.	0.	1.	3.	33.	45.	18.	1.	≥ 30	≥ 40
8000.	126.	0.	0.	0.	0.	1.	1.	26.	54.	18.	0.	0.	0.	0.	0.	0.
10000.	126.	0.	0.	0.	0.	2.	24.	56.	18.	0.	0.	0.	0.	0.	0.	0.
12000.	126.	0.	0.	0.	0.	20.	64.	14.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	125.	0.	0.	0.	0.	14.	76.	10.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	122.	0.	0.	3.	49.	48.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

16000.	124.	0.	0.	0.	0.	0.	0.	0.	0.	0.	10.	77.	12.	0.	0.	0.
18000.	123.	0.	0.	0.	0.	0.	0.	0.	0.	0.	71.	22.	0.	0.	0.	0.
20000.	123.	0.	0.	0.	0.	0.	0.	3.	59.	37.	0.	0.	0.	0.	0.	0.
25000.	122.	0.	0.	0.	0.	12.	57.	30.	2.	0.	0.	0.	0.	0.	0.	0.
30000.	118.	0.	1.	28.	56.	15.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

GEOMETRIC
ALTITUDE
MSL FEET

TOTAL OBS	< -80	≥ -80	< -75	≥ -75	< -70	≥ -70	< -65	≥ -65	< -60	≥ -60	< -55	≥ -55	< -50	≥ -50	< -45	≥ -45	< -40	≥ -40	< -35	≥ -35	< -30	≥ -30	< -25	≥ -25
35000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.	38.	51.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40000.	0.	0.	0.	0.	0.	0.	2.	31.	64.	0.	0.	0.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
45000.	0.	0.	0.	0.	0.	5.	69.	25.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	13.	62.	20.	20.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
55000.	0.	1.	0.	28.	56.	15.	15.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	0.	0.	0.	0.	41.	52.	52.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	0.	0.	0.	0.	0.	38.	38.	62.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	0.	0.	0.	0.	0.	1.	1.	88.	11.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	0.	0.	0.	0.	0.	0.	0.	17.	83.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	0.	0.	0.	0.	0.	0.	0.	0.	71.	0.	0.	29.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	0.	0.	0.	0.	0.	0.	0.	0.	8.	0.	0.	90.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	52.	48.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	12.	83.	0.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	60.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

JULY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	TEMPERATURE °CELSIUS											
		≥ -10 < -10	≥ -5 < -5	≥ 0 < 5	≥ 5 < 10	≥ 10 < 15	≥ 15 < 20	≥ 20 < 25	≥ 25 < 30	≥ 30 < 35	≥ 35 < 40	≥ 40 < 45	≥ 45
6000.	149.	0.	0.	0.	0.	1.	21.	60.	19.	0.	0.	0.	0.
8000.	148.	0.	0.	0.	0.	12.	71.	17.	0.	0.	0.	0.	0.
10000.	150.	0.	0.	0.	5.	77.	18.	0.	0.	0.	0.	0.	0.
12000.	150.	0.	0.	2.	77.	21.	0.	0.	0.	0.	0.	0.	0.
14000.	150.	0.	1.	69.	29.	0.	6.	0.	0.	0.	0.	0.	0.
15000.	141.	0.	6.	93.	1.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	149.	0.	0.	0.	0.	0.	0.	0.	1.	50.	50.	10.	0.
18000.	146.	0.	0.	0.	0.	0.	0.	0.	25.	75.	0.	0.	0.
20000.	146.	0.	0.	0.	0.	0.	0.	7.	91.	2.	0.	0.	0.
25000.	139.	0.	0.	0.	0.	3.	91.	6.	0.	0.	0.	0.	0.
30000.	145.	0.	0.	13.	81.	6.	0.	0.	0.	0.	0.	0.	0.

GEOMETRIC
ALTITUDE
MSL FEET

TOTAL
OBS

	≥ -80	< -80	≥ -75	< -75	≥ -70	< -70	≥ -65	< -65	≥ -60	< -60	≥ -55	< -55	≥ -50	< -50	≥ -45	< -45	≥ -40	< -40	≥ -35	< -35	≥ -30	< -30	≥ -25
35000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	39.	61.	0.	0.	0.	0.	0.	0.	0.
40000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
45000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
55000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

AUGUST

86

GEOMETRIC
ALTITUDE
MSL FEET

TOTAL
OBS

	<-80	>-80 <-75	>-75 <-70	>-70 <-65	>-65 <-60	>-60 <-55	>-55 <-50	>-50 <-45	>-45 <-40	>-40 <-35	>-35 <-30	>-30 <-25
35000.	0.	0.	0.	0.	0.	0.	0.	1.	60.	39.	0.	0.
40000.	0.	0.	0.	0.	0.	1.	90.	8.	0.	0.	0.	0.
45000.	0.	0.	0.	2.	90.	7.	0.	0.	0.	0.	0.	0.
50000.	0.	0.	39.	54.	8.	0.	0.	0.	0.	0.	0.	0.
55000.	0.	4.	30.	63.	3.	0.	0.	0.	0.	0.	0.	0.
60000.	0.	0.	0.	37.	62.	1.	0.	0.	0.	0.	0.	0.
65000.	0.	0.	0.	0.	44.	56.	0.	0.	0.	0.	0.	0.
70000.	0.	0.	0.	0.	0.	88.	12.	0.	0.	0.	0.	0.
75000.	0.	0.	0.	0.	0.	19.	81.	0.	0.	0.	0.	0.
80000.	0.	0.	0.	0.	0.	2.	77.	20.	0.	0.	0.	0.
85000.	0.	0.	0.	0.	0.	0.	19.	81.	0.	0.	0.	0.
90000.	0.	0.	0.	0.	0.	0.	2.	81.	17.	0.	0.	0.
95000.	0.	0.	0.	0.	0.	0.	0.	28.	70.	2.	0.	0.
100000.	0.	0.	0.	0.	0.	0.	0.	5.	60.	35.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

SEPTEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	TEMPERATURE °CELSIUS														
		< -15	≥ -15	< -10	≥ -10	< -5	≥ -5	< 0	≥ 0	< 5	≥ 5	< 10	≥ 10	< 15	≥ 15	≥ 20
6000.	122.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	123.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	123.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	121.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	121.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	117.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	121.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	120.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20000.	122.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
25000.	116.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30000.	120.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS												
		> -80 < -80	> -80 < -75	> -75 < -70	> -70 < -65	> -65 < -60	> -60 < -55	> -55 < -50	> -50 < -45	> -45 < -40	> -40 < -35	> -35 < -30	> -30 < -25
35000.	115.	0.	0.	0.	0.	0.	0.	0.	16.	69.	15.	1.	0.
40000.	114.	0.	0.	0.	1.	11.	11.	79.	9.	0.	0.	0.	0.
45000.	106.	0.	0.	4.	83.	11.	2.	2.	0.	0.	0.	0.	0.
50000.	105.	0.	0.	58.	7.	2.	0.	0.	0.	0.	0.	0.	0.
55000.	92.	0.	5.	42.	5.	1.	1.	0.	0.	0.	0.	0.	0.
60000.	83.	0.	0.	1.	46.	1.	1.	0.	0.	0.	0.	0.	0.
65000.	76.	0.	0.	3.	66.	32.	32.	0.	0.	0.	0.	0.	0.
70000.	73.	0.	0.	0.	10.	79.	79.	11.	0.	0.	0.	0.	0.
75000.	73.	0.	0.	0.	1.	44.	44.	53.	1.	0.	0.	0.	0.
80000.	71.	0.	0.	0.	0.	3.	3.	83.	14.	0.	0.	0.	0.
85000.	70.	0.	0.	0.	0.	0.	0.	36.	63.	1.	0.	0.	0.
90000.	66.	0.	0.	0.	0.	0.	0.	3.	83.	12.	2.	0.	0.
95000.	62.	0.	0.	0.	0.	0.	0.	2.	32.	66.	0.	0.	0.
100000.	55.	0.	0.	0.	0.	0.	0.	0.	13.	78.	9.	0.	0.

GEOMETRIC
ALTITUDE
MSL FEET

TOTAL
OBS

		≥ -80	< -80	≥ -75	< -75	≥ -70	< -70	≥ -65	< -65	≥ -60	< -60	≥ -55	< -55	≥ -50	< -50	≥ -45	< -45	≥ -40	< -40	≥ -35	< -35	≥ -30	< -30	≥ -25
35000.	133.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	23.	36.	52.	23.	2.	0.	23.	0.	0.	0.	0.	0.	0.
40000.	132.	0.	0.	0.	0.	15.	0.	48.	9.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
45000.	117.	0.	0.	1.	11.	79.	0.	9.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	108.	0.	0.	15.	69.	16.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
55000.	94.	0.	0.	41.	50.	9.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	89.	0.	0.	4.	66.	29.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	82.	0.	0.	0.	15.	56.	0.	20.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	80.	0.	0.	0.	0.	26.	0.	69.	0.	5.	0.	5.	41.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	75.	0.	0.	0.	0.	0.	0.	59.	3.	94.	3.	94.	49.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	71.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	49.	17.	51.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	57.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	17.	9.	81.	2.	0.	0.	2.	0.	0.	0.	0.	0.	0.
90000.	53.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	9.	6.	76.	15.	0.	0.	15.	0.	0.	0.	0.	0.	0.
95000.	46.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	70.	24.	0.	0.	24.	0.	0.	0.	0.	0.	0.
100000.	33.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

NOVEMBER

TEMPERATURE °CELSIUS

GEOMETRIC
ALTITUDE
MSL FEET

TOTAL
OBS

	< -25	≥ -25 < -20	≥ -20 < -15	≥ -15 < -10	≥ -10 < -5	≥ -5 < 0	≥ 0 < 5	≥ 5 < 10	≥ 10 < 15	≥ 15 < 20	≥ 20 < 25	≥ 25 < 30	≥ 30
6000.	0.	0.	0.	0.	0.	1.	14.	27.	50.	9.	0.	0.	0.
8000.	0.	0.	0.	0.	0.	6.	22.	54.	17.	1.	0.	0.	0.
10000.	0.	0.	0.	0.	0.	12.	52.	33.	1.	0.	0.	0.	0.
12000.	0.	0.	0.	2.	3.	42.	49.	4.	0.	0.	0.	0.	0.
14000.	0.	0.	1.	2.	27.	57.	13.	0.	0.	0.	0.	0.	0.
15000.	0.	0.	1.	6.	36.	52.	5.	0.	0.	0.	0.	0.	0.

	< -55	≥ -55 < -50	≥ -50 < -45	≥ -45 < -40	≥ -40 < -35	≥ -35 < -30	≥ -30 < -25	≥ -25 < -20	≥ -20 < -15	≥ -15 < -10	≥ -10 < -5	≥ -5 < 0	≥ 0
16000.	0.	0.	0.	0.	0.	0.	0.	0.	1.	18.	54.	27.	0.
18000.	0.	0.	0.	0.	0.	0.	0.	1.	5.	58.	35.	2.	0.
20000.	0.	0.	0.	0.	0.	0.	1.	3.	55.	38.	3.	0.	0.
25000.	0.	0.	0.	1.	0.	12.	49.	34.	4.	0.	0.	0.	0.
30000.	0.	0.	1.	27.	53.	19.	0.	0.	0.	0.	0.	0.	0.

GEOMETRIC
ALTITUDE
MSL FEET

TOTAL
OBS

TOTAL		< -85	≥ -85	< -80	≥ -80	< -75	≥ -75	< -70	≥ -70	< -65	≥ -65	< -60	≥ -60	< -55	≥ -55	< -50	≥ -50	< -45	≥ -45	< -40	≥ -40	< -35	≥ -35	< -30	≥ -30
UBS																									
138.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	34.	34.	53.	53.	12.	12.	0.	0.	0.	0.	0.	0.	0.
126.	0.	0.	0.	0.	0.	0.	1.	1.	35.	35.	49.	49.	13.	13.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
111.	0.	0.	0.	0.	0.	4.	33.	33.	54.	54.	8.	8.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
101.	0.	0.	0.	1.	18.	18.	57.	57.	22.	22.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
86.	0.	0.	0.	1.	28.	28.	51.	51.	20.	20.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
78.	0.	0.	0.	0.	10.	10.	65.	65.	24.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
74.	0.	0.	0.	0.	0.	0.	30.	30.	65.	65.	5.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
62.	0.	0.	0.	0.	0.	0.	2.	2.	66.	66.	32.	32.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
54.	0.	0.	0.	0.	0.	0.	0.	0.	22.	22.	65.	65.	13.	13.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	58.	58.	40.	40.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
44.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	18.	18.	64.	64.	18.	18.	0.	0.	0.	0.	0.	0.	0.	0.	0.
41.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	7.	44.	44.	49.	49.	0.	0.	0.	0.	0.	0.	0.	0.	0.
41.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	29.	29.	59.	59.	12.	12.	0.	0.	0.	0.	0.	0.	0.
34.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	15.	15.	41.	41.	44.	44.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

DECEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	TEMPERATURE °CELSIUS												
		> -30 < -30	> -30 < -25	> -25 < -20	> -20 < -15	> -15 < -10	> -10 < -5	> -5 < 0	> 0 < 5	> 5 < 10	> 10 < 15	> 15 < 20	> 20 < 25	> 25
6000.	148.	0.	0.	0.	0.	0.	0.	10.	31.	45.	14.	0.	0.	0.
8000.	149.	0.	0.	0.	0.	0.	7.	19.	54.	19.	0.	0.	0.	0.
10000.	149.	0.	0.	0.	1.	3.	15.	35.	41.	6.	0.	0.	0.	0.
12000.	149.	0.	0.	0.	1.	9.	30.	37.	22.	1.	0.	0.	0.	0.
14000.	149.	0.	0.	1.	3.	22.	37.	32.	5.	0.	0.	0.	0.	0.
15000.	149.	0.	1.	0.	12.	27.	40.	21.	0.	0.	0.	0.	0.	0.
16000.	148.	0.	0.	0.	0.	0.	0.	0.	0.	2.	18.	30.	43.	7.
18000.	147.	0.	0.	0.	0.	0.	0.	0.	1.	16.	29.	45.	10.	0.
20000.	146.	0.	0.	0.	0.	0.	0.	0.	1.	28.	46.	13.	0.	0.
25000.	138.	0.	0.	0.	0.	1.	12.	45.	37.	5.	0.	0.	0.	0.
30000.	134.	0.	0.	0.	20.	52.	26.	1.	0.	0.	0.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	>-80 <-80	>-75 <-75	>-70 <-70	>-65 <-65	>-60 <-60	>-55 <-55	>-50 <-50	>-45 <-45	>-40 <-40	>-35 <-35	>-30 <-30	>-25
35000.	126.	0.	0.	0.	0.	13.	60.	24.	2.	0.	0.	0.	0.
40000.	119.	0.	0.	6.	32.	40.	17.	5.	0.	0.	0.	0.	0.
45000.	107.	0.	0.	13.	48.	34.	3.	0.	0.	0.	0.	0.	0.
50000.	92.	0.	1.	32.	55.	5.	0.	0.	0.	0.	0.	0.	0.
55000.	81.	0.	1.	64.	23.	2.	0.	0.	0.	0.	0.	0.	0.
60000.	73.	0.	0.	64.	29.	1.	0.	0.	0.	0.	0.	0.	0.
65000.	65.	0.	0.	32.	62.	6.	0.	0.	0.	0.	0.	0.	0.
70000.	63.	0.	0.	6.	7.	16.	0.	0.	0.	0.	0.	0.	0.
75000.	61.	0.	0.	0.	57.	36.	7.	0.	0.	0.	0.	0.	0.
80000.	57.	0.	0.	0.	18.	68.	14.	0.	0.	0.	0.	0.	0.
85000.	53.	0.	0.	0.	0.	66.	34.	0.	0.	0.	0.	0.	0.
90000.	52.	0.	0.	0.	0.	29.	65.	6.	0.	0.	0.	0.	0.
95000.	42.	0.	0.	0.	0.	10.	60.	31.	0.	0.	0.	0.	0.
100000.	37.	0.	0.	0.	0.	3.	38.	46.	14.	0.	0.	0.	0.

MEAN, MEDIAN AND EXTREME UPPER AIR TEMPERATURES (°CELSIUS)
 AT SELECTED LEVELS BY SEASONS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MINXER			
		MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	376.	18.	5.	5.	-6.
8000.	377.	12.	1.	2.	-10.
10000.	378.	7.	-2.	-1.	-16.
12000.	377.	6.	-5.	-4.	-19.
14000.	377.	2.	-9.	-8.	-23.
15000.	375.	-0.	-10.	-10.	-26.
16000.	376.	-2.	-12.	-12.	-26.
18000.	374.	-7.	-17.	-16.	-31.
20000.	372.	-11.	-21.	-21.	-36.
25000.	360.	-24.	-33.	-32.	-47.
30000.	349.	-34.	-44.	-44.	-53.
35000.	329.	-39.	-53.	-53.	-62.
40000.	314.	-45.	-57.	-57.	-68.
45000.	292.	-51.	-60.	-60.	-73.
50000.	250.	-52.	-64.	-64.	-75.
55000.	214.	-55.	-65.	-65.	-76.
60000.	186.	-53.	-65.	-65.	-74.
65000.	170.	-56.	-63.	-64.	-70.
70000.	161.	-54.	-61.	-61.	-69.
75000.	149.	-51.	-59.	-59.	-64.
80000.	141.	-45.	-57.	-57.	-62.
85000.	132.	-48.	-55.	-55.	-61.
90000.	122.	-45.	-53.	-53.	-60.
95000.	95.	-42.	-50.	-50.	-58.
100000.	76.	-42.	-48.	-48.	-57.

MEAN, MEDIAN AND EXTREME UPPER AIR TEMPERATURES (° CELSIUS)
 AT SELECTED LEVELS BY SEASONS
 JALLAN SITE (JAL)
 PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	SPRING				
	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	428.	27.	13.	13.	-9.
8000.	425.	21.	8.	9.	-15.
10000.	423.	15.	3.	4.	-18.
12000.	421.	10.	-1.	-1.	-24.
14000.	421.	6.	-5.	-5.	-28.
15000.	414.	3.	-7.	-7.	-29.
16000.	418.	1.	-9.	-9.	-29.
18000.	417.	-4.	-14.	-13.	-31.
20000.	415.	-8.	-18.	-18.	-36.
25000.	407.	-20.	-29.	-29.	-45.
30000.	410.	-30.	-41.	-41.	-53.
35000.	391.	-42.	-52.	-52.	-61.
40000.	384.	-43.	-58.	-59.	-69.
45000.	350.	-50.	-60.	-60.	-70.
50000.	339.	-51.	-63.	-63.	-75.
55000.	313.	-57.	-64.	-64.	-74.
60000.	289.	-56.	-64.	-64.	-71.
65000.	263.	-55.	-61.	-61.	-68.
70000.	257.	-50.	-58.	-58.	-64.
75000.	228.	-47.	-55.	-55.	-65.
80000.	211.	-47.	-52.	-52.	-58.
85000.	191.	-44.	-50.	-50.	-56.
90000.	179.	-43.	-47.	-47.	-54.
95000.	160.	-36.	-44.	-44.	-52.
100000.	121.	-36.	-42.	-41.	-52.

MEAN, MEDIAN AND EXTREME UPPER AIR TEMPERATURES (°CELSIUS)
 AT SELECTED LEVELS BY SEASONS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	SUMMER			
		MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	434.	31.	22.	22.	9.
8000.	431.	24.	17.	17.	5.
10000.	433.	19.	13.	13.	2.
12000.	433.	13.	8.	8.	-1.
14000.	432.	8.	3.	3.	-5.
15000.	414.	6.	1.	1.	-7.
16000.	429.	3.	-1.	-1.	-9.
18000.	425.	-1.	-5.	-5.	-12.
20000.	425.	-5.	-9.	-9.	-18.
25000.	410.	-13.	-19.	-18.	-29.
30000.	415.	-23.	-30.	-29.	-42.
35000.	387.	-35.	-41.	-41.	-51.
40000.	396.	-48.	-53.	-52.	-64.
45000.	365.	-55.	-62.	-62.	-66.
50000.	353.	-50.	-69.	-69.	-74.
55000.	320.	-62.	-70.	-70.	-77.
60000.	308.	-57.	-65.	-65.	-70.
65000.	280.	-56.	-60.	-60.	-65.
70000.	273.	-53.	-57.	-57.	-60.
75000.	252.	-50.	-54.	-54.	-58.
80000.	239.	-47.	-51.	-51.	-56.
85000.	212.	-44.	-49.	-48.	-54.
90000.	197.	-41.	-46.	-46.	-52.
95000.	175.	-39.	-43.	-43.	-50.
100000.	165.	-36.	-41.	-40.	-48.

MEAN, MEDIAN AND EXTREME UPPER AIR TEMPERATURES (° CELSIUS)
 AT SELECTED LEVELS BY SEASONS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	FALL			
		MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	425.	25.	14.	14.	-1.
8000.	427.	19.	10.	10.	-3.
10000.	427.	14.	6.	7.	-9.
12000.	425.	10.	2.	3.	-12.
14000.	423.	5.	-1.	-1.	-18.
15000.	413.	3.	-3.	-3.	-18.
16000.	420.	2.	-5.	-5.	-20.
18000.	419.	-1.	-9.	-9.	-24.
20000.	421.	-5.	-13.	-13.	-28.
25000.	409.	-15.	-24.	-24.	-41.
30000.	412.	-25.	-35.	-36.	-45.
35000.	386.	-34.	-46.	-47.	-56.
40000.	372.	-46.	-56.	-56.	-67.
45000.	334.	-54.	-63.	-63.	-72.
50000.	314.	-57.	-68.	-68.	-76.
55000.	272.	-59.	-69.	-69.	-78.
60000.	250.	-58.	-66.	-66.	-72.
65000.	232.	-55.	-62.	-62.	-69.
70000.	215.	-53.	-59.	-59.	-65.
75000.	202.	-49.	-56.	-56.	-62.
80000.	192.	-47.	-53.	-53.	-60.
85000.	171.	-41.	-50.	-50.	-59.
90000.	160.	-39.	-48.	-48.	-56.
95000.	149.	-41.	-47.	-46.	-54.
100000.	122.	-38.	-45.	-44.	-53.

SECTION III

UPPER AIR PRESSURE DATA

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1. Mean and Extreme Upper Air Pressures
(Millibars) at Selected Levels ----- 112

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

JANUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	116.	829.	816.	805.
8000.	116.	768.	757.	747.
10000.	117.	713.	702.	690.
12000.	116.	661.	649.	637.
14000.	116.	612.	601.	588.
15000.	115.	589.	577.	564.
16000.	116.	567.	555.	541.
18000.	116.	524.	512.	497.
20000.	115.	483.	472.	456.
25000.	115.	394.	382.	364.
30000.	110.	318.	306.	290.
35000.	103.	254.	243.	231.
40000.	102.	200.	191.	183.
45000.	95.	155.	150.	144.
50000.	84.	121.	118.	114.
55000.	69.	95.	92.	89.
60000.	56.	74.	72.	70.
65000.	50.	58.	56.	55.
70000.	44.	45.5	44.0	42.5
75000.	38.	36.0	34.5	33.5
80000.	37.	28.5	27.0	26.5
85000.	35.	22.5	21.5	20.5
90000.	31.	17.9	16.9	16.4
95000.	23.	14.2	13.4	13.0
100000.	15.	11.3	10.7	10.4

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

FEBRUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	112.	827.	817.	805.
8000.	112.	767.	758.	740.
10000.	112.	711.	702.	690.
12000.	112.	659.	650.	637.
14000.	112.	611.	601.	586.
15000.	111.	588.	577.	563.
16000.	112.	566.	555.	540.
18000.	111.	523.	512.	496.
20000.	111.	484.	471.	455.
25000.	107.	395.	382.	363.
30000.	105.	319.	306.	288.
35000.	100.	254.	242.	229.
40000.	93.	203.	191.	182.
45000.	90.	161.	150.	144.
50000.	74.	127.	118.	114.
55000.	64.	97.	92.	89.
60000.	57.	75.	72.	70.
65000.	55.	59.	56.	54.
70000.	54.	46.0	43.5	42.5
75000.	50.	36.0	34.5	33.0
80000.	47.	28.5	27.0	26.0
85000.	44.	22.5	21.5	20.5
90000.	39.	17.9	16.9	16.4
95000.	30.	14.2	13.4	13.0
100000.	24.	11.3	10.7	10.4

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

MARCH

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	161.	823.	816.	805.
8000.	161.	765.	757.	747.
10000.	160.	711.	702.	691.
12000.	159.	660.	651.	636.
14000.	159.	612.	602.	585.
15000.	156.	589.	579.	561.
16000.	160.	566.	556.	537.
18000.	159.	524.	513.	494.
20000.	157.	484.	473.	454.
25000.	152.	394.	383.	364.
30000.	154.	318.	307.	289.
35000.	147.	253.	244.	230.
40000.	145.	200.	192.	182.
45000.	132.	156.	151.	145.
50000.	129.	122.	118.	114.
55000.	112.	95.	92.	89.
60000.	102.	75.	72.	69.
65000.	88.	59.	56.	54.
70000.	85.	46.0	44.0	43.0
75000.	69.	36.5	34.5	33.5
80000.	58.	29.0	27.5	26.5
85000.	48.	23.0	21.5	21.0
90000.	44.	18.1	17.2	16.7
95000.	40.	14.3	13.6	13.2
100000.	30.	11.4	10.9	10.5

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS) AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

APRIL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	139.	827.	816.	803.
8000.	137.	768.	759.	745.
10000.	137.	713.	704.	692.
12000.	137.	661.	653.	641.
14000.	137.	613.	605.	593.
15000.	136.	590.	581.	569.
16000.	136.	567.	559.	547.
18000.	137.	525.	516.	505.
20000.	137.	485.	476.	465.
25000.	136.	396.	387.	374.
30000.	135.	320.	311.	299.
35000.	130.	256.	248.	238.
40000.	122.	200.	195.	187.
45000.	115.	156.	153.	147.
50000.	110.	123.	120.	115.
55000.	103.	97.	94.	90.
60000.	93.	75.	73.	71.
65000.	84.	59.	57.	55.
70000.	82.	46.0	45.0	43.0
75000.	78.	36.5	35.5	34.0
80000.	75.	29.0	28.0	27.0
85000.	70.	23.0	22.0	21.5
90000.	64.	18.3	17.6	17.0
95000.	57.	14.5	14.0	13.5
100000.	41.	11.6	11.2	10.8

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

MAY

GEOGRAPHIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	128.	827.	818.	808.
8000.	127.	769.	761.	751.
10000.	126.	715.	707.	697.
12000.	125.	664.	656.	646.
14000.	125.	616.	608.	597.
15000.	122.	591.	585.	574.
16000.	122.	571.	563.	551.
18000.	121.	527.	521.	508.
20000.	121.	487.	481.	467.
25000.	119.	398.	392.	377.
30000.	121.	323.	316.	304.
35000.	114.	259.	252.	242.
40000.	115.	205.	199.	191.
45000.	103.	161.	156.	151.
50000.	100.	125.	122.	118.
55000.	58.	98.	95.	93.
60000.	94.	76.	74.	73.
65000.	91.	60.	58.	57.
70000.	90.	47.0	45.5	44.5
75000.	81.	37.0	36.0	35.0
80000.	78.	29.5	28.5	27.5
85000.	73.	23.5	22.5	22.0
90000.	71.	18.6	18.0	17.5
95000.	63.	14.9	14.4	13.9
100000.	50.	11.8	11.5	11.1

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

JUNE

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	128.	825.	817.	812.
8000.	126.	768.	762.	756.
10000.	126.	715.	709.	702.
12000.	126.	664.	658.	651.
14000.	125.	617.	611.	603.
15000.	122.	595.	588.	580.
16000.	124.	573.	566.	558.
18000.	123.	531.	524.	515.
20000.	123.	491.	485.	476.
25000.	122.	402.	396.	387.
30000.	118.	327.	321.	312.
35000.	111.	264.	257.	249.
40000.	114.	210.	204.	195.
45000.	110.	165.	160.	154.
50000.	105.	130.	125.	120.
55000.	98.	100.	97.	94.
60000.	96.	78.	76.	74.
65000.	94.	61.	59.	58.
70000.	91.	48.0	46.5	45.5
75000.	88.	37.5	36.5	36.0
80000.	78.	30.0	29.0	28.5
85000.	73.	24.0	23.0	22.5
90000.	65.	19.0	18.4	18.0
95000.	58.	15.1	14.7	14.3
100000.	53.	12.1	11.7	11.4

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

JULY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	149.	826.	821.	816.
8000.	147.	769.	765.	760.
10000.	150.	716.	712.	705.
12000.	150.	666.	662.	656.
14000.	150.	619.	614.	610.
15000.	141.	595.	592.	587.
16000.	149.	574.	570.	565.
18000.	146.	532.	528.	523.
20000.	146.	492.	489.	483.
25000.	139.	404.	400.	395.
30000.	145.	329.	326.	321.
35000.	133.	266.	262.	258.
40000.	137.	212.	209.	204.
45000.	121.	167.	164.	160.
50000.	118.	130.	128.	124.
55000.	104.	101.	99.	96.
60000.	101.	78.	77.	75.
65000.	90.	61.	60.	59.
70000.	89.	48.0	47.0	45.5
75000.	81.	38.0	37.0	36.0
80000.	81.	30.0	29.5	28.5
85000.	72.	24.0	23.5	22.5
90000.	69.	19.0	18.6	17.9
95000.	59.	15.2	14.8	14.2
100000.	57.	12.1	11.8	11.3

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

AUGUST

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	157.	825.	821.	816.
8000.	157.	770.	755.	760.
10000.	157.	717.	712.	706.
12000.	157.	667.	661.	656.
14000.	157.	620.	614.	608.
15000.	151.	597.	591.	586.
16000.	156.	576.	569.	564.
18000.	156.	534.	527.	522.
20000.	156.	484.	488.	483.
25000.	149.	405.	399.	395.
30000.	152.	329.	324.	320.
35000.	144.	266.	261.	257.
40000.	145.	212.	208.	203.
45000.	134.	167.	163.	160.
50000.	132.	130.	127.	124.
55000.	119.	100.	99.	96.
60000.	110.	79.	77.	75.
65000.	96.	61.	60.	59.
70000.	93.	48.0	47.5	46.0
75000.	85.	38.0	37.5	36.5
80000.	80.	30.5	29.5	28.5
85000.	70.	24.0	23.5	23.0
90000.	64.	19.1	18.6	18.1
95000.	60.	15.3	14.9	14.4
100000.	55.	12.3	11.9	11.4

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

SEPTEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	121.	826.	820.	811.
8000.	123.	768.	763.	756.
10000.	123.	715.	710.	703.
12000.	121.	664.	659.	652.
14000.	121.	617.	611.	604.
15000.	117.	594.	589.	581.
16000.	121.	572.	567.	559.
18000.	120.	520.	525.	517.
20000.	122.	490.	485.	476.
25000.	116.	402.	397.	386.
30000.	120.	327.	322.	309.
35000.	115.	264.	258.	246.
40000.	114.	212.	205.	196.
45000.	106.	168.	161.	155.
50000.	104.	125.	126.	122.
55000.	91.	100.	98.	95.
60000.	82.	78.	76.	74.
65000.	76.	61.	59.	58.
70000.	74.	47.5	46.5	45.5
75000.	72.	37.5	36.5	35.5
80000.	71.	29.5	29.0	28.0
85000.	69.	23.5	23.0	22.5
90000.	65.	18.8	18.3	17.6
95000.	62.	15.0	14.6	14.0
100000.	55.	12.0	11.6	11.1

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS

JALILEN SITE (JAL)

PERIOD OF RECORD 1962-1967

OCTOBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	143.	830.	820.	811.
8000.	144.	770.	763.	754.
10000.	145.	715.	709.	694.
12000.	145.	664.	657.	642.
14000.	142.	615.	610.	594.
15000.	139.	592.	587.	571.
16000.	142.	570.	564.	549.
18000.	141.	527.	522.	507.
20000.	141.	487.	482.	468.
25000.	137.	399.	393.	381.
30000.	137.	324.	318.	306.
35000.	133.	260.	254.	244.
40000.	132.	207.	201.	193.
45000.	117.	163.	158.	154.
50000.	108.	127.	123.	119.
55000.	94.	98.	95.	92.
60000.	89.	76.	74.	72.
65000.	82.	59.	58.	56.
70000.	80.	46.5	45.5	43.5
75000.	75.	36.5	35.5	34.5
80000.	71.	29.0	28.0	27.0
85000.	57.	23.0	22.5	21.5
90000.	53.	18.3	17.8	17.1
95000.	46.	14.6	14.1	13.6
100000.	33.	11.6	11.2	10.8

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

NOVEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	159.	827.	819.	807.
8000.	160.	769.	761.	748.
10000.	159.	715.	706.	693.
12000.	159.	664.	655.	641.
14000.	160.	616.	607.	592.
15000.	157.	593.	584.	568.
16000.	157.	571.	561.	545.
18000.	158.	529.	519.	502.
20000.	158.	489.	479.	462.
25000.	156.	400.	390.	371.
30000.	154.	324.	314.	296.
35000.	138.	260.	251.	236.
40000.	126.	206.	198.	188.
45000.	111.	161.	155.	149.
50000.	101.	125.	120.	117.
55000.	86.	97.	94.	91.
60000.	78.	75.	73.	71.
65000.	74.	58.	57.	55.
70000.	62.	45.5	44.5	43.0
75000.	54.	36.0	35.0	34.0
80000.	50.	28.5	27.5	26.5
85000.	44.	22.5	21.5	21.0
90000.	41.	17.7	17.2	16.5
95000.	41.	14.1	13.6	13.1
100000.	34.	11.3	10.9	10.4

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

DECEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	147.	824.	816.	805.
8000.	148.	765.	757.	747.
10000.	149.	710.	702.	690.
12000.	149.	659.	650.	639.
14000.	149.	611.	602.	590.
15000.	149.	587.	578.	566.
16000.	148.	565.	556.	543.
18000.	147.	523.	513.	501.
20000.	146.	483.	473.	461.
25000.	138.	394.	384.	371.
30000.	134.	318.	308.	295.
35000.	126.	255.	245.	237.
40000.	119.	201.	193.	187.
45000.	107.	158.	152.	147.
50000.	92.	123.	119.	116.
55000.	81.	95.	92.	90.
60000.	73.	73.	72.	71.
65000.	65.	57.	56.	55.
70000.	63.	44.5	44.0	43.0
75000.	61.	35.0	34.5	33.5
80000.	57.	27.5	27.0	26.5
85000.	53.	21.5	21.5	20.5
90000.	52.	17.1	16.8	16.3
95000.	42.	13.6	13.3	12.9
100000.	37.	10.8	10.5	10.2

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY SEASONS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

WINTER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	375.	829.	817.	805.
8000.	376.	768.	757.	746.
10000.	378.	713.	702.	690.
12000.	377.	661.	650.	637.
14000.	377.	612.	601.	586.
15000.	375.	589.	578.	563.
16000.	376.	567.	555.	540.
18000.	374.	524.	512.	496.
20000.	372.	484.	472.	455.
25000.	360.	395.	383.	363.
30000.	349.	319.	307.	288.
35000.	329.	255.	243.	229.
40000.	314.	203.	192.	182.
45000.	292.	161.	151.	144.
50000.	250.	127.	118.	114.
55000.	214.	97.	92.	89.
60000.	186.	75.	72.	70.
65000.	170.	59.	56.	54.
70000.	161.	46.0	44.0	42.5
75000.	149.	36.0	34.5	33.0
80000.	141.	28.5	27.0	26.0
85000.	132.	22.5	21.5	20.5
90000.	122.	17.9	16.9	16.3
95000.	95.	14.2	13.4	12.9
100000.	76.	11.3	10.6	10.2

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY SEASONS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

SPRING

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	428.	827.	817.	803.
8000.	425.	769.	759.	745.
10000.	423.	715.	704.	691.
12000.	421.	664.	653.	636.
14000.	421.	616.	605.	585.
15000.	414.	591.	582.	561.
16000.	418.	571.	559.	537.
18000.	417.	527.	516.	494.
20000.	415.	487.	476.	454.
25000.	407.	398.	387.	364.
30000.	410.	323.	311.	289.
35000.	391.	259.	248.	230.
40000.	382.	205.	195.	182.
45000.	350.	161.	153.	145.
50000.	339.	125.	120.	114.
55000.	313.	98.	94.	89.
60000.	289.	76.	73.	69.
65000.	263.	60.	57.	54.
70000.	257.	47.0	45.0	43.0
75000.	228.	37.0	35.5	33.5
80000.	211.	29.5	28.0	26.5
85000.	191.	23.5	22.0	21.0
90000.	179.	18.6	17.7	16.7
95000.	160.	14.9	14.1	13.2
100000.	121.	11.9	11.3	10.5

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS) AT SELECTED LEVELS BY SEASONS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

SUMMER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	434.	826.	820.	812.
8000.	430.	770.	764.	756.
10000.	433.	717.	711.	702.
12000.	433.	667.	661.	651.
14000.	432.	620.	613.	603.
15000.	414.	597.	591.	580.
16000.	429.	576.	569.	558.
18000.	425.	534.	527.	515.
20000.	425.	494.	487.	476.
25000.	410.	405.	399.	387.
30000.	415.	329.	324.	312.
35000.	388.	266.	260.	249.
40000.	396.	212.	207.	195.
45000.	365.	167.	163.	154.
50000.	355.	130.	127.	120.
55000.	321.	101.	98.	94.
60000.	307.	79.	76.	74.
65000.	280.	61.	60.	58.
70000.	273.	48.0	47.0	45.5
75000.	254.	38.0	37.0	36.0
80000.	239.	30.5	29.5	28.5
85000.	215.	24.0	23.5	22.5
90000.	198.	19.1	18.5	17.9
95000.	177.	15.3	14.8	14.2
100000.	165.	12.3	11.8	11.3

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS) AT SELECTED LEVELS BY SEASONS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

FALL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	423.	830.	820.	807.
8000.	427.	770.	762.	748.
10000.	427.	715.	708.	693.
12000.	425.	664.	657.	641.
14000.	423.	617.	609.	592.
15000.	413.	594.	586.	568.
16000.	420.	572.	564.	545.
18000.	419.	530.	522.	502.
20000.	421.	490.	482.	462.
25000.	409.	402.	393.	371.
30000.	411.	327.	318.	296.
35000.	386.	264.	254.	236.
40000.	372.	212.	201.	188.
45000.	334.	168.	158.	149.
50000.	313.	129.	123.	117.
55000.	271.	100.	96.	91.
60000.	249.	78.	74.	71.
65000.	232.	61.	58.	55.
70000.	216.	47.5	45.5	43.0
75000.	201.	37.5	36.0	34.0
80000.	192.	29.5	28.5	26.5
85000.	170.	23.5	22.5	21.0
90000.	159.	18.8	17.8	16.5
95000.	149.	15.0	14.2	13.1
100000.	122.	12.0	11.3	10.4

SECTION IV

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1. Mean and Extreme Upper Air Densities
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MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

JANUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	116.	1068.	1027.	993.
8000.	116.	1002.	963.	932.
10000.	117.	940.	901.	877.
12000.	116.	879.	845.	822.
14000.	116.	822.	792.	771.
15000.	115.	796.	767.	749.
16000.	116.	771.	743.	727.
18000.	116.	715.	697.	681.
20000.	115.	670.	654.	639.
25000.	115.	567.	555.	546.
30000.	110.	476.	467.	441.
35000.	103.	399.	384.	352.
40000.	102.	330.	303.	283.
45000.	95.	267.	245.	229.
50000.	84.	207.	195.	184.
55000.	69.	161.	153.	144.
60000.	56.	124.	119.	115.
65000.	50.	96.	92.	89.
70000.	44.	74.	72.	69.
75000.	38.	58.	56.	54.
80000.	37.	46.	44.	41.
85000.	35.	36.	34.	33.
90000.	31.	28.	27.	26.
95000.	23.	22.	21.	20.
100000.	15.	18.	17.	16.

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

FEBRUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	112.	1067.	1022.	978.
3000.	112.	1000.	962.	927.
10000.	112.	933.	904.	870.
12000.	112.	876.	848.	819.
14000.	112.	821.	794.	769.
15000.	111.	795.	769.	747.
16000.	112.	763.	745.	725.
18000.	111.	720.	698.	683.
20000.	111.	670.	654.	643.
25000.	107.	566.	555.	545.
30000.	105.	476.	467.	449.
35000.	100.	399.	380.	353.
40000.	93.	330.	307.	282.
45000.	90.	262.	243.	227.
50000.	74.	211.	195.	180.
55000.	64.	167.	153.	145.
60000.	57.	132.	120.	113.
65000.	55.	97.	93.	89.
70000.	54.	75.	72.	69.
75000.	50.	59.	56.	54.
80000.	47.	46.	43.	41.
85000.	44.	36.	34.	33.
90000.	39.	28.	27.	25.
95000.	30.	22.	21.	20.
100000.	24.	18.	16.	16.

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

MARCH

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	161.	1077.	1008.	965.
8000.	161.	1018.	950.	917.
10000.	160.	952.	825.	867.
12000.	159.	888.	842.	819.
14000.	159.	832.	791.	772.
15000.	156.	801.	767.	752.
16000.	160.	767.	743.	728.
18000.	159.	720.	697.	683.
20000.	157.	674.	654.	640.
25000.	152.	566.	554.	543.
30000.	154.	476.	466.	445.
35000.	147.	400.	387.	352.
40000.	144.	331.	312.	284.
45000.	132.	266.	246.	229.
50000.	129.	206.	196.	182.
55000.	112.	161.	154.	146.
60000.	102.	125.	119.	113.
65000.	88.	96.	93.	89.
70000.	85.	75.	72.	69.
75000.	69.	58.	56.	53.
80000.	58.	46.	43.	42.
85000.	48.	36.	34.	33.
90000.	44.	28.	27.	26.
95000.	40.	22.	21.	20.
100000.	30.	18.	17.	16.

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

APRIL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	139.	1022.	991.	961.
8000.	137.	968.	938.	912.
10000.	137.	914.	886.	865.
12000.	137.	859.	835.	817.
14000.	137.	800.	785.	768.
15000.	136.	775.	761.	743.
16000.	136.	751.	737.	721.
18000.	137.	706.	692.	679.
20000.	137.	662.	650.	639.
25000.	136.	563.	552.	540.
30000.	135.	475.	467.	453.
35000.	130.	399.	390.	371.
40000.	122.	332.	317.	292.
45000.	115.	265.	250.	235.
50000.	110.	213.	199.	185.
55000.	103.	163.	156.	148.
60000.	93.	128.	122.	117.
65000.	84.	98.	94.	91.
70000.	82.	75.	73.	69.
75000.	78.	58.	56.	54.
80000.	75.	45.	44.	42.
85000.	70.	36.	35.	33.
90000.	64.	28.	27.	26.
95000.	57.	22.	21.	20.
100000.	41.	18.	17.	16.

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

MAY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	128.	1022.	977.	946.
8000.	127.	969.	925.	899.
10000.	125.	904.	875.	853.
12000.	124.	851.	827.	809.
14000.	124.	798.	780.	761.
15000.	121.	770.	756.	740.
16000.	121.	748.	734.	714.
18000.	121.	702.	690.	671.
20000.	121.	659.	648.	632.
25000.	119.	559.	551.	542.
30000.	119.	475.	467.	457.
35000.	112.	400.	392.	376.
40000.	113.	333.	323.	302.
45000.	103.	272.	257.	245.
50000.	100.	212.	202.	192.
55000.	98.	166.	159.	150.
60000.	94.	130.	125.	118.
65000.	91.	100.	96.	91.
70000.	90.	76.	74.	72.
75000.	81.	59.	57.	55.
80000.	78.	46.	45.	43.
85000.	73.	36.	35.	34.
90000.	71.	28.	28.	27.
95000.	63.	23.	22.	21.
100000.	50.	18.	17.	17.

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

JUNE

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	128.	1001.	964.	926.
8000.	126.	945.	912.	885.
10000.	126.	886.	863.	839.
12000.	126.	832.	817.	802.
14000.	125.	784.	772.	762.
15000.	122.	760.	750.	742.
16000.	124.	737.	728.	721.
18000.	123.	695.	685.	674.
20000.	123.	654.	643.	633.
25000.	122.	558.	548.	537.
30000.	118.	472.	465.	456.
35000.	111.	396.	391.	378.
40000.	113.	331.	324.	307.
45000.	110.	273.	264.	253.
50000.	104.	222.	211.	195.
55000.	98.	174.	165.	156.
60000.	96.	132.	126.	120.
65000.	94.	99.	97.	94.
70000.	91.	77.	75.	73.
75000.	88.	60.	58.	57.
80000.	78.	47.	46.	44.
85000.	73.	37.	36.	35.
90000.	65.	29.	28.	27.
95000.	58.	23.	22.	22.
100000.	53.	18.	18.	17.

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

JULY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	149.	990.	962.	936.
8000.	147.	935.	911.	893.
10000.	150.	880.	862.	847.
12000.	150.	828.	815.	801.
14000.	150.	780.	770.	760.
15000.	141.	758.	748.	739.
16000.	149.	735.	726.	718.
18000.	146.	691.	683.	675.
20000.	146.	650.	640.	634.
25000.	139.	550.	544.	539.
30000.	145.	469.	462.	455.
35000.	132.	397.	391.	388.
40000.	137.	332.	329.	324.
45000.	121.	276.	272.	266.
50000.	117.	226.	220.	212.
55000.	103.	177.	170.	165.
60000.	101.	133.	129.	126.
65000.	89.	100.	98.	96.
70000.	89.	77.	76.	73.
75000.	79.	60.	59.	57.
80000.	81.	47.	46.	45.
85000.	70.	37.	36.	35.
90000.	69.	29.	28.	27.
95000.	57.	23.	22.	22.
100000.	57.	18.	18.	17.

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

AUGUST

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	157.	994.	965.	934.
8000.	157.	942.	913.	890.
10000.	157.	888.	864.	847.
12000.	157.	835.	817.	805.
14000.	157.	784.	772.	763.
15000.	151.	759.	749.	742.
16000.	156.	735.	727.	721.
18000.	156.	694.	684.	677.
20000.	156.	652.	642.	634.
25000.	149.	554.	545.	538.
30000.	152.	471.	463.	456.
35000.	144.	399.	391.	386.
40000.	145.	333.	327.	322.
45000.	134.	276.	270.	262.
50000.	132.	225.	217.	208.
55000.	119.	178.	169.	162.
60000.	110.	133.	128.	124.
65000.	96.	100.	98.	95.
70000.	93.	78.	76.	74.
75000.	85.	60.	59.	58.
80000.	80.	47.	46.	45.
85000.	64.	37.	36.	36.
90000.	63.	29.	29.	28.
95000.	60.	23.	23.	22.
100000.	55.	18.	18.	17.

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

SEPTEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	121.	1009.	975.	952.
8000.	123.	952.	922.	905.
10000.	123.	895.	871.	859.
12000.	121.	845.	822.	812.
14000.	121.	791.	775.	769.
15000.	117.	767.	752.	738.
16000.	121.	744.	729.	714.
18000.	120.	700.	684.	671.
20000.	122.	658.	641.	62.
25000.	116.	562.	546.	537.
30000.	120.	473.	464.	455.
35000.	115.	397.	390.	374.
40000.	114.	331.	324.	302.
45000.	106.	273.	266.	247.
50000.	104.	223.	215.	199.
55000.	91.	173.	167.	155.
60000.	82.	131.	127.	122.
65000.	76.	100.	97.	93.
70000.	73.	77.	75.	73.
75000.	72.	60.	59.	57.
80000.	71.	47.	46.	44.
85000.	69.	37.	36.	35.
90000.	65.	29.	28.	27.
95000.	62.	23.	22.	22.
100000.	55.	18.	18.	17.

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

OCTOBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	143.	1036.	992.	959.
8000.	144.	980.	935.	909.
10000.	145.	927.	881.	860.
12000.	145.	870.	829.	810.
14000.	142.	820.	780.	763.
15000.	139.	788.	756.	740.
16000.	142.	756.	732.	714.
18000.	141.	703.	687.	677.
20000.	141.	657.	645.	629.
25000.	137.	558.	550.	534.
30000.	137.	476.	467.	451.
35000.	133.	402.	391.	373.
40000.	132.	330.	323.	303.
45000.	117.	271.	261.	253.
50000.	108.	218.	208.	200.
55000.	94.	172.	163.	154.
60000.	89.	130.	125.	121.
65000.	82.	99.	95.	91.
70000.	80.	76.	74.	71.
75000.	75.	59.	57.	55.
80000.	71.	46.	45.	43.
85000.	56.	36.	35.	33.
90000.	53.	28.	28.	27.
95000.	46.	22.	22.	21.
100000.	33.	18.	17.	17.

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

NOVEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	157.	1052.	1005.	972.
8000.	159.	986.	945.	920.
10000.	158.	922.	888.	871.
12000.	158.	862.	834.	815.
14000.	160.	809.	783.	769.
15000.	157.	783.	758.	743.
16000.	157.	757.	734.	718.
18000.	158.	709.	689.	673.
20000.	158.	661.	647.	633.
25000.	156.	562.	550.	534.
30000.	154.	473.	465.	448.
35000.	137.	397.	390.	370.
40000.	125.	332.	322.	299.
45000.	110.	274.	258.	244.
50000.	100.	218.	204.	194.
55000.	86.	169.	159.	152.
60000.	78.	128.	123.	119.
65000.	74.	98.	94.	91.
70000.	62.	75.	73.	71.
75000.	54.	58.	57.	55.
80000.	50.	46.	44.	43.
85000.	44.	36.	34.	34.
90000.	41.	28.	27.	26.
95000.	41.	22.	21.	20.
100000.	34.	17.	17.	16.

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

DECEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	147.	1067.	1019.	976.
8000.	148.	995.	957.	928.
10000.	149.	939.	898.	874.
12000.	149.	877.	841.	815.
14000.	149.	823.	788.	768.
15000.	149.	796.	763.	743.
16000.	148.	755.	738.	720.
18000.	147.	708.	693.	678.
20000.	146.	665.	650.	634.
25000.	138.	566.	553.	535.
30000.	134.	474.	466.	448.
35000.	126.	397.	386.	365.
40000.	119.	330.	314.	297.
45000.	107.	266.	250.	237.
50000.	92.	211.	198.	189.
55000.	81.	166.	156.	148.
60000.	73.	126.	121.	117.
65000.	65.	96.	93.	89.
70000.	63.	74.	72.	70.
75000.	61.	57.	56.	54.
80000.	57.	45.	44.	43.
85000.	53.	35.	34.	34.
90000.	52.	27.	27.	26.
95000.	42.	21.	21.	20.
100000.	37.	17.	16.	16.

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER) AT SELECTED LEVELS BY SEASONS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

WINTER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	375.	1068.	1022.	976.
8000.	376.	1002.	960.	927.
10000.	378.	940.	901.	870.
12000.	377.	879.	844.	815.
14000.	377.	823.	791.	768.
15000.	375.	796.	766.	743.
16000.	376.	771.	742.	720.
18000.	374.	720.	696.	678.
20000.	372.	670.	652.	634.
25000.	365.	567.	554.	535.
30000.	349.	476.	466.	441.
35000.	329.	399.	385.	352.
40000.	314.	330.	310.	282.
45000.	292.	267.	246.	227.
50000.	250.	211.	196.	180.
55000.	214.	167.	154.	144.
60000.	186.	132.	120.	113.
65000.	170.	97.	93.	89.
70000.	161.	75.	72.	69.
75000.	149.	59.	56.	54.
80000.	141.	46.	44.	41.
85000.	132.	36.	34.	33.
90000.	122.	28.	27.	25.
95000.	95.	22.	21.	20.
100000.	76.	18.	16.	16.

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY SEASONS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

SPRING

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	428.	1077.	993.	946.
8000.	425.	1018.	939.	899.
10000.	422.	952.	886.	853.
12000.	420.	888.	835.	809.
14000.	420.	832.	786.	761.
15000.	413.	801.	762.	740.
16000.	417.	767.	738.	714.
18000.	417.	720.	693.	671.
20000.	415.	674.	651.	632.
25000.	407.	566.	553.	540.
30000.	408.	476.	467.	445.
35000.	389.	400.	389.	352.
40000.	379.	333.	317.	284.
45000.	350.	272.	251.	229.
50000.	339.	213.	199.	182.
55000.	313.	166.	156.	146.
60000.	289.	130.	122.	113.
65000.	263.	100.	94.	89.
70000.	257.	76.	73.	69.
75000.	228.	59.	57.	53.
80000.	211.	46.	44.	42.
85000.	191.	36.	35.	33.
90000.	179.	28.	27.	26.
95000.	160.	23.	21.	20.
100000.	121.	18.	17.	16.

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY SEASONS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

SUMMER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	NEAN	MINIMUM
6000.	434.	1001.	963.	926.
8000.	430.	945.	912.	885.
10000.	433.	888.	863.	839.
12000.	433.	835.	816.	801.
14000.	432.	784.	771.	760.
15000.	414.	760.	749.	739.
16000.	429.	737.	727.	718.
18000.	425.	695.	684.	674.
20000.	425.	654.	642.	633.
25000.	410.	558.	546.	537.
30000.	415.	472.	463.	455.
35000.	387.	399.	391.	378.
40000.	395.	333.	327.	307.
45000.	365.	276.	269.	253.
50000.	353.	226.	216.	195.
55000.	320.	178.	168.	156.
60000.	307.	133.	128.	120.
65000.	279.	100.	98.	94.
70000.	273.	78.	76.	73.
75000.	252.	60.	59.	57.
80000.	239.	47.	46.	44.
85000.	212.	37.	36.	35.
90000.	197.	29.	28.	27.
95000.	175.	23.	22.	22.
100000.	165.	18.	18.	17.

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY SEASONS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

FALL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	421.	1052.	992.	952.
8000.	426.	986.	935.	905.
10000.	426.	927.	881.	859.
12000.	424.	870.	829.	810.
14000.	423.	820.	780.	763.
15000.	413.	788.	756.	738.
16000.	420.	757.	732.	714.
18000.	419.	709.	687.	671.
20000.	421.	661.	645.	629.
25000.	409.	562.	549.	534.
30000.	411.	476.	466.	448.
35000.	385.	402.	391.	370.
40000.	371.	332.	323.	299.
45000.	333.	274.	262.	244.
50000.	312.	223.	209.	194.
55000.	271.	173.	163.	152.
60000.	249.	131.	125.	119.
65000.	232.	100.	96.	91.
70000.	215.	77.	74.	71.
75000.	201.	60.	57.	55.
80000.	192.	47.	45.	43.
85000.	169.	37.	35.	33.
90000.	159.	29.	28.	26.
95000.	149.	23.	22.	20.
100000.	122.	18.	17.	16.

SECTION V

UPPER AIR MOISTURE DATA

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MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	JANUARY		
		MAXIMUM	MEAN	MINIMUM
6000.	116.	5.098	2.171	0.643
8000.	114.	4.405	1.899	0.587
10000.	115.	3.779	1.542	0.480
12000.	115.	2.439	1.236	0.103
14000.	114.	2.063	0.950	0.086
16000.	112.	2.165	0.761	0.099
18000.	113.	2.172	0.570	0.082
20000.	111.	1.502	0.413	0.030
22000.	111.	1.221	0.296	0.009
24000.	107.	0.645	0.213	0.019
26000.	102.	1.570	0.159	0.006
28000.	78.	0.416	0.099	0.006
30000.	54.	0.250	0.052	0.003
32000.	28.	0.119	0.021	0.001
34000.	10.	0.040	0.009	0.001
36000.	3.	0.003	0.002	0.002
38000.	0.	0.	0.	0.
40000.	0.	0.	0.	0.
42000.	0.	0.	0.	0.
44000.	0.	0.	0.	0.
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

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MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

FEBRUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	112.	6.779	2.262	0.762
8000.	112.	5.360	1.917	0.532
10000.	112.	3.891	1.531	0.178
12000.	111.	3.781	1.151	0.144
14000.	109.	2.900	0.870	0.083
16000.	108.	3.099	0.651	0.172
18000.	107.	1.947	0.530	0.102
20000.	107.	1.439	0.416	0.056
22000.	106.	1.519	0.325	0.027
24000.	104.	0.879	0.236	0.004
26000.	98.	0.596	0.155	0.001
28000.	84.	0.319	0.094	0.005
30000.	51.	0.231	0.050	0.002
32000.	21.	0.077	0.021	0.001
34000.	6.	0.034	0.010	0.001
36000.	2.	0.012	0.007	0.001
38000.	1.	0.002	0.002	0.002
40000.	0.	0.	0.	0.
42000.	0.	0.	0.	0.
44000.	0.	0.	0.	0.
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MARCH		
		MAXIMUM	MEAN	MINIMUM
6000.	161.	6.428	2.560	0.535
8000.	161.	5.505	2.188	0.407
10000.	160.	4.328	1.793	0.277
12000.	159.	3.284	1.401	0.375
14000.	159.	2.334	1.066	0.175
16000.	159.	1.960	0.810	0.148
18000.	158.	2.284	0.623	0.103
20000.	155.	1.802	0.475	0.046
22000.	153.	1.374	0.356	0.008
24000.	152.	0.973	0.265	0.023
26000.	142.	0.725	0.199	0.012
28000.	123.	0.438	0.136	0.007
30000.	96.	0.317	0.081	0.002
32000.	62.	0.155	0.037	0.001
34000.	32.	0.054	0.018	0.001
36000.	15.	0.014	0.007	0.001
38000.	5.	0.026	0.006	0.000
40000.	0.	0.	0.	0.
42000.	0.	0.	0.	0.
44000.	0.	0.	0.	0.
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

APRIL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	139.	7.447	3.218	1.129
8000.	137.	6.533	2.683	0.276
10000.	136.	6.325	2.174	0.548
12000.	136.	4.868	1.711	0.469
14000.	135.	4.015	1.295	0.329
16000.	131.	3.466	1.033	0.030
18000.	135.	2.511	0.776	0.082
20000.	133.	1.920	0.617	0.145
22000.	132.	1.639	0.474	0.015
24000.	130.	1.299	0.345	0.051
26000.	128.	0.917	0.241	0.004
28000.	127.	0.568	0.160	0.003
30000.	117.	0.316	0.097	0.002
32000.	87.	0.165	0.048	0.002
34000.	50.	0.066	0.022	0.001
36000.	21.	0.046	0.009	0.001
38000.	6.	0.030	0.007	0.001
40000.	1.	0.018	0.018	0.018
42000.	1.	0.008	0.008	0.008
44000.	1.	0.001	0.001	0.001
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAY		
		MAXIMUM	MEAN	MINIMUM
6000.	125.	11.348	4.691	1.273
8000.	126.	8.474	3.935	1.127
10000.	125.	6.513	3.222	0.842
12000.	125.	6.457	2.561	0.640
14000.	124.	6.099	2.069	0.395
16000.	120.	5.233	1.667	0.134
18000.	120.	4.464	1.218	0.097
20000.	120.	3.857	0.863	0.056
22000.	121.	3.339	0.624	0.165
24000.	120.	2.875	0.483	0.117
26000.	120.	1.512	0.330	0.020
28000.	120.	1.091	0.229	0.070
30000.	119.	0.657	0.145	0.011
32000.	108.	0.383	0.079	0.005
34000.	70.	0.214	0.033	0.002
36000.	32.	0.041	0.011	0.001
38000.	9.	0.008	0.003	0.001
40000.	0.	0.	0.	0.
42000.	0.	0.	0.	0.
44000.	0.	0.	0.	0.
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY MONTHS
 JALLEN SITE (JALI)
 PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	JUNE		
		MAXIMUM	MEAN	MINIMUM
6000.	128.	12.334	6.417	1.326
8000.	126.	10.601	5.466	0.570
10000.	126.	8.779	4.521	0.321
12000.	126.	7.891	3.720	0.187
14000.	125.	7.090	3.057	0.415
16000.	124.	5.274	2.368	0.448
18000.	122.	4.384	1.697	0.103
20000.	120.	3.524	1.159	0.052
22000.	120.	2.310	0.811	0.037
24000.	120.	1.307	0.576	0.043
26000.	117.	1.398	0.435	0.093
28000.	115.	0.950	0.304	0.008
30000.	109.	0.627	0.216	0.005
32000.	97.	0.468	0.147	0.022
34000.	88.	0.302	0.077	0.003
36000.	52.	0.168	0.039	0.002
38000.	28.	0.065	0.018	0.001
40000.	12.	0.017	0.006	0.001
42000.	1.	0.006	0.006	0.006
44000.	0.	0.	0.	0.
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	JULY		
		MAXIMUM	MEAN	MINIMUM
6000.	149.	13.616	9.603	6.109
8000.	147.	10.984	8.329	5.965
10000.	150.	9.861	7.050	3.479
12000.	150.	8.772	5.958	1.636
14000.	150.	7.928	4.880	0.880
16000.	149.	6.128	3.999	1.082
18000.	146.	5.399	3.147	0.910
20000.	146.	4.302	2.361	0.141
22000.	146.	3.351	1.673	0.348
24000.	146.	2.628	1.160	0.279
26000.	144.	2.068	0.829	0.142
28000.	142.	1.318	0.593	0.016
30000.	142.	0.915	0.401	0.011
32000.	135.	0.598	0.276	0.008
34000.	133.	0.385	0.160	0.027
36000.	120.	0.207	0.089	0.003
38000.	86.	0.096	0.035	0.002
40000.	46.	0.038	0.014	0.001
42000.	14.	0.016	0.005	0.001
44000.	3.	0.005	0.003	0.001
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	AUGUST		
		MAXIMUM	MEAN	MINIMUM
6000.	157.	14.642	9.454	3.774
8000.	157.	11.772	8.117	0.702
10000.	157.	9.879	6.920	3.600
12000.	157.	9.393	5.714	2.307
14000.	157.	8.404	4.596	0.827
16000.	156.	6.152	3.695	0.623
18000.	156.	5.242	2.880	0.527
20000.	156.	4.285	2.038	0.429
22000.	154.	3.328	1.390	0.310
24000.	154.	2.568	0.982	0.109
26000.	154.	1.923	0.746	0.017
28000.	150.	1.444	0.522	0.093
30000.	148.	1.012	0.370	0.090
32000.	148.	0.680	0.249	0.027
34000.	135.	0.436	0.156	0.012
36000.	93.	0.266	0.074	0.003
38000.	56.	0.121	0.031	0.002
40000.	24.	0.043	0.013	0.003
42000.	5.	0.006	0.005	0.003
44000.	0.	0.	0.	0.
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

SEPTEMBER				
GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	121.	12.021	8.305	3.318
8000.	123.	11.013	7.107	3.149
10000.	123.	9.588	5.932	2.677
12000.	121.	8.408	4.686	0.594
14000.	121.	6.615	3.650	0.463
16000.	121.	5.621	2.804	0.105
18000.	117.	4.806	2.009	0.458
20000.	118.	3.518	1.464	0.042
22000.	116.	2.864	1.097	0.096
24000.	116.	2.382	0.775	0.056
26000.	117.	1.812	0.571	0.121
28000.	117.	1.286	0.412	0.075
30000.	117.	0.913	0.301	0.018
32000.	112.	0.568	0.199	0.011
34000.	89.	0.377	0.114	0.004
36000.	50.	0.285	0.053	0.002
38000.	22.	0.124	0.029	0.002
40000.	9.	0.025	0.008	0.001
42000.	1.	0.009	0.009	0.009
44000.	1.	0.002	0.002	0.002
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	OCTOBER			
	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	143.	10.777	4.969	2.012
8000.	144.	9.484	4.312	1.900
10000.	145.	8.150	3.584	0.630
12000.	145.	7.432	2.708	0.275
14000.	139.	5.669	1.919	0.279
16000.	136.	3.779	1.357	0.048
18000.	130.	2.898	1.048	0.030
20000.	126.	2.505	0.808	0.192
22000.	125.	2.001	0.620	0.071
24000.	125.	1.911	0.477	0.052
26000.	125.	1.373	0.348	0.012
28000.	123.	1.009	0.250	0.062
30000.	120.	0.641	0.170	0.013
32000.	110.	0.391	0.094	0.002
34000.	76.	0.256	0.051	0.001
36000.	35.	0.080	0.030	0.001
38000.	12.	0.034	0.018	0.002
40000.	5.	0.012	0.008	0.001
42000.	2.	0.002	0.001	0.001
44000.	0.	0.	0.	0.
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	NOVEMBER		
		MAXIMUM	MEAN	MINIMUM
6000.	159.	8.328	3.815	1.727
8000.	159.	6.933	3.278	0.814
10000.	157.	6.964	2.650	0.849
12000.	156.	6.057	2.068	0.493
14000.	155.	5.389	1.632	0.327
16000.	150.	4.607	1.315	0.328
18000.	153.	3.190	1.004	0.035
20000.	152.	2.773	0.829	0.168
22000.	154.	2.283	0.641	0.015
24000.	153.	1.663	0.503	0.065
26000.	151.	1.194	0.370	0.027
28000.	143.	0.819	0.264	0.018
30000.	132.	0.535	0.175	0.009
32000.	109.	0.297	0.095	0.005
34000.	72.	0.166	0.046	0.001
36000.	30.	0.067	0.022	0.001
38000.	14.	0.033	0.010	0.001
40000.	3.	0.014	0.008	0.003
42000.	1.	0.005	0.005	0.005
44000.	1.	0.001	0.001	0.001
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	DECEMBER		
		MAXIMUM	MEAN	MINIMUM
6000.	147.	6.736	3.170	1.115
8000.	148.	6.354	2.647	0.849
10000.	149.	5.725	2.061	0.223
12000.	146.	5.140	1.604	0.029
14000.	144.	4.138	1.240	0.126
16000.	140.	3.413	0.925	0.084
18000.	138.	3.226	0.685	0.025
20000.	134.	2.693	0.559	0.036
22000.	130.	2.178	0.418	0.017
24000.	129.	1.534	0.306	0.027
26000.	128.	0.770	0.203	0.006
28000.	119.	0.459	0.138	0.006
30000.	94.	0.304	0.085	0.002
32000.	49.	0.294	0.043	0.001
34000.	15.	0.078	0.022	0.002
36000.	4.	0.016	0.009	0.002
38000.	2.	0.003	0.002	0.001
40000.	0.	0.	0.	0.
42000.	0.	0.	0.	0.
44000.	0.	0.	0.	0.
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

JANUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4051.- 6000.	102.	0.308	0.152	0.063
6000.- 8000.	114.	0.262	0.121	0.038
8000.- 10000.	114.	0.228	0.095	0.031
10000.- 12000.	114.	0.155	0.072	0.016
12000.- 14000.	114.	0.109	0.054	0.016
14000.- 16000.	111.	0.090	0.040	0.004
16000.- 18000.	112.	0.093	0.029	0.005
18000.- 20000.	111.	0.073	0.020	0.002
20000.- 22000.	109.	0.051	0.014	0.003
22000.- 24000.	107.	0.031	0.009	0.001
24000.- 26000.	102.	0.029	0.006	0.001
26000.- 28000.	78.	0.026	0.004	0.001
28000.- 30000.	54.	0.009	0.002	0.000
30000.- 32000.	28.	0.005	0.001	0.000
32000.- 34000.	10.	0.002	0.001	0.000
34000.- 36000.	3.	0.000	0.000	0.000
36000.- 38000.	0.	0.	0.	0.
38000.- 40000.	0.	0.	0.	0.
40000.- 42000.	0.	0.	0.	0.
42000.- 44000.	0.	0.	0.	0.
44000.- 46000.	0.	0.	0.	0.
46000.- 48000.	0.	0.	0.	0.
48000.- 50000.	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

FEBRUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4051.- 6000.	104.	0.485	0.156	0.071
6000.- 8000.	112.	0.353	0.123	0.041
8000.- 10000.	112.	0.253	0.095	0.020
10000.- 12000.	111.	0.190	0.070	0.021
12000.- 14000.	109.	0.160	0.050	0.018
14000.- 16000.	107.	0.135	0.035	0.011
16000.- 18000.	107.	0.107	0.025	0.008
18000.- 20000.	107.	0.060	0.019	0.003
20000.- 22000.	106.	0.055	0.014	0.002
22000.- 24000.	103.	0.041	0.010	0.001
24000.- 26000.	98.	0.024	0.006	0.001
26000.- 28000.	84.	0.013	0.004	0.001
28000.- 30000.	51.	0.008	0.002	0.000
30000.- 32000.	21.	0.004	0.001	0.000
32000.- 34000.	6.	0.001	0.001	0.000
34000.- 36000.	2.	0.001	0.000	0.000
36000.- 38000.	1.	0.000	0.000	0.000
38000.- 40000.	0.	0.	0.	0.
40000.- 42000.	0.	0.	0.	0.
42000.- 44000.	0.	0.	0.	0.
44000.- 46000.	0.	0.	0.	0.
46000.- 48000.	0.	0.	0.	0.
48000.- 50000.	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	MARCH		
	TOTAL OBSERVATIONS	MAXIMUM	MINIMUM
4051.- 6000.	154.	0.441	0.083
6000.- 8000.	161.	0.307	0.029
8000.- 10000.	150.	0.271	0.020
10000.- 12000.	159.	0.177	0.018
12000.- 14000.	158.	0.121	0.017
14000.- 16000.	158.	0.093	0.00.
16000.- 18000.	158.	0.074	0.007
18000.- 20000.	155.	0.081	0.003
20000.- 22000.	153.	0.059	0.001
22000.- 24000.	149.	0.041	0.002
24000.- 26000.	142.	0.028	0.001
26000.- 28000.	123.	0.017	0.001
28000.- 30000.	96.	0.010	0.001
30000.- 32000.	62.	0.006	0.000
32000.- 34000.	32.	0.003	0.000
34000.- 36000.	15.	0.001	0.000
36000.- 38000.	5.	0.000	0.000
38000.- 40000.	0.	0.	0.
40000.- 42000.	0.	0.	0.
42000.- 44000.	0.	0.	0.
44000.- 46000.	0.	0.	0.
46000.- 48000.	0.	0.	0.
48000.- 50000.	0.	0.	0.

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

APRIL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4051.- 6000.-	136.	0.483	0.201	0.070
6000.- 8000.-	136.	0.395	0.170	0.058
8000.- 10000.-	136.	0.327	0.133	0.048
10000.- 12000.-	135.	0.287	0.100	0.036
12000.- 14000.-	135.	0.202	0.073	0.025
14000.- 16000.-	132.	0.162	0.053	0.008
16000.- 18000.-	133.	0.123	0.039	0.009
18000.- 20000.-	133.	0.087	0.028	0.005
20000.- 22000.-	132.	0.065	0.021	0.003
22000.- 24000.-	130.	0.052	0.014	0.001
24000.- 26000.-	128.	0.036	0.010	0.002
26000.- 28000.-	127.	0.023	0.006	0.001
28000.- 30000.-	117.	0.012	0.004	0.000
30000.- 32000.-	87.	0.006	0.002	0.000
32000.- 34000.-	50.	0.003	0.001	0.000
34000.- 36000.-	21.	0.001	0.000	0.000
36000.- 38000.-	6.	0.001	0.000	0.000
38000.- 40000.-	1.	0.000	0.000	0.000
40000.- 42000.-	1.	0.000	0.000	0.000
42000.- 44000.-	1.	0.000	0.000	0.000
44000.- 46000.-	0.	0.	0.	0.
46000.- 48000.-	0.	0.	0.	0.
48000.- 50000.-	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAY		
		MAXIMUM	MEAN	MINIMUM
4051.- 6000.	124.	0.678	0.289	0.063
6000.- 8000.	124.	0.556	0.244	0.071
8000.- 10000.	125.	0.359	0.192	0.054
10000.- 12000.	125.	0.312	0.147	0.039
12000.- 14000.	124.	0.300	0.111	0.027
14000.- 16000.	120.	0.254	0.084	0.013
16000.- 18000.	119.	0.202	0.061	0.005
18000.- 20000.	119.	0.162	0.042	0.006
20000.- 22000.	120.	0.132	0.028	0.004
22000.- 24000.	120.	0.106	0.019	0.006
24000.- 26000.	119.	0.071	0.013	0.002
26000.- 28000.	119.	0.040	0.009	0.002
28000.- 30000.	119.	0.025	0.005	0.001
30000.- 32000.	108.	0.014	0.003	0.001
32000.- 34000.	70.	0.007	0.002	0.000
34000.- 36000.	32.	0.002	0.001	0.000
36000.- 38000.	9.	0.000	0.000	0.000
38000.- 40000.	0.	0.	0.	0.
40000.- 42000.	0.	0.	0.	0.
42000.- 44000.	0.	0.	0.	0.
44000.- 46000.	0.	0.	0.	0.
46000.- 48000.	0.	0.	0.	0.
48000.- 50000.	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	JUNE		
	TOTAL OBSERVATIONS	MAXIMUM	MEAN
4051.- 6000.	128.	0.818	0.395
6000.- 3000.	126.	0.625	0.334
8000.- 10000.	126.	0.518	0.264
10000.- 12000.	126.	0.421	0.206
12000.- 14000.	125.	0.339	0.161
14000.- 16000.	123.	0.249	0.121
16000.- 18000.	122.	0.197	0.086
18000.- 20000.	120.	0.154	0.057
20000.- 22000.	119.	0.096	0.037
22000.- 24000.	119.	0.058	0.024
24000.- 26000.	117.	0.037	0.017
26000.- 28000.	113.	0.036	0.011
28000.- 30000.	108.	0.023	0.008
30000.- 32000.	97.	0.014	0.005
32000.- 34000.	88.	0.009	0.003
34000.- 36000.	52.	0.006	0.002
36000.- 38000.	28.	0.003	0.001
38000.- 40000.	12.	0.001	0.000
40000.- 42000.	1.	0.000	0.000
42000.- 44000.	0.	0.	0.
44000.- 46000.	0.	0.	0.
46000.- 48000.	0.	0.	0.
48000.- 50000.	0.	0.	0.

MINIMUM
0.094
0.053
0.018
0.008
0.014
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0.012
0.015
0.004
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MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

JULY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4051.- 6000.	148.	0.898	0.598	0.313
6000.- 8000.	147.	0.654	0.503	0.339
8000.- 10000.	147.	0.552	0.407	0.292
10000.- 12000.	150.	0.438	0.325	0.167
12000.- 14000.	150.	0.372	0.254	0.078
14000.- 16000.	149.	0.298	0.198	0.058
16000.- 18000.	146.	0.237	0.150	0.042
18000.- 20000.	145.	0.188	0.109	0.031
20000.- 22000.	145.	0.138	0.075	0.022
22000.- 24000.	146.	0.099	0.049	0.011
24000.- 26000.	144.	0.068	0.032	0.009
26000.- 28000.	141.	0.048	0.022	0.004
28000.- 30000.	141.	0.032	0.014	0.001
30000.- 32000.	135.	0.020	0.009	0.001
32000.- 34000.	133.	0.012	0.006	0.001
34000.- 36000.	119.	0.007	0.003	0.000
36000.- 38000.	86.	0.003	0.002	0.000
38000.- 40000.	46.	0.001	0.001	0.000
40000.- 42000.	14.	0.001	0.000	0.000
42000.- 44000.	3.	0.000	0.000	0.000
44000.- 46000.	0.	0.	0.	0.
46000.- 48000.	0.	0.	0.	0.
48000.- 50000.	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

AUGUST

GEOGRAPHIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4051.- 6000.	154.	0.795	0.574	0.217
6000.- 8000.	157.	0.722	0.492	0.199
8000.- 10000.	157.	0.559	0.399	0.184
10000.- 12000.	157.	0.473	0.317	0.179
12000.- 14000.	157.	0.398	0.244	0.073
14000.- 16000.	156.	0.321	0.186	0.032
16000.- 18000.	155.	0.238	0.138	0.024
18000.- 20000.	156.	0.187	0.097	0.019
20000.- 22000.	154.	0.136	0.064	0.014
22000.- 24000.	154.	0.101	0.041	0.009
24000.- 26000.	153.	0.072	0.028	0.004
26000.- 28000.	150.	0.051	0.019	0.004
28000.- 30000.	148.	0.034	0.013	0.004
30000.- 32000.	145.	0.022	0.008	0.002
32000.- 34000.	135.	0.014	0.005	0.001
34000.- 36000.	93.	0.008	0.003	0.000
36000.- 38000.	56.	0.004	0.001	0.000
38000.- 40000.	24.	0.002	0.001	0.000
40000.- 42000.	5.	0.000	0.000	0.000
42000.- 44000.	0.	0.	0.	0.
44000.- 46000.	0.	0.	0.	0.
46000.- 48000.	0.	0.	0.	0.
48000.- 50000.	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967.

SEPTEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4051.- 6000.	121.	0.748	0.533	0.235
6000.- 8000.	121.	0.643	0.437	0.195
8000.- 10000.	123.	0.547	0.349	0.168
10000.- 12000.	121.	0.446	0.269	0.128
12000.- 14000.	120.	0.345	0.199	0.060
14000.- 16000.	121.	0.269	0.145	0.013
16000.- 18000.	117.	0.211	0.103	0.030
18000.- 20000.	114.	0.157	0.069	0.019
20000.- 22000.	116.	0.117	0.047	0.003
22000.- 24000.	114.	0.090	0.032	0.004
24000.- 26000.	114.	0.068	0.022	0.003
26000.- 28000.	116.	0.047	0.015	0.003
28000.- 30000.	117.	0.031	0.010	0.001
30000.- 32000.	111.	0.020	0.007	0.002
32000.- 34000.	89.	0.011	0.004	0.001
34000.- 36000.	50.	0.008	0.002	0.001
36000.- 38000.	22.	0.004	0.001	0.000
38000.- 40000.	9.	0.001	0.000	0.000
40000.- 42000.	1.	0.000	0.000	0.000
42000.- 44000.	1.	0.000	0.000	0.000
44000.- 46000.	0.	0.	0.	0.
46000.- 48000.	0.	0.	0.	0.
48000.- 50000.	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	OCTOBER			MINIMUM
	TOTAL OBSERVATIONS	MAXIMUM	MEAN	
4051.- 6000.	142.	0.670	0.320	0.148
6000.- 8000.	143.	0.582	0.266	0.118
8000.- 10000.	144.	0.473	0.214	0.102
10000.- 12000.	145.	0.368	0.160	0.039
12000.- 14000.	139.	0.311	0.112	0.025
14000.- 16000.	136.	0.190	0.074	0.012
16000.- 18000.	130.	0.141	0.052	0.006
18000.- 20000.	125.	0.106	0.037	0.010
20000.- 22000.	123.	0.076	0.027	0.009
22000.- 24000.	125.	0.068	0.019	0.002
24000.- 26000.	124.	0.054	0.013	0.002
26000.- 28000.	123.	0.030	0.009	0.002
28000.- 30000.	120.	0.023	0.006	0.001
30000.- 32000.	109.	0.014	0.004	0.001
32000.- 34000.	76.	0.008	0.002	0.000
34000.- 36000.	35.	0.004	0.001	0.000
36000.- 38000.	12.	0.001	0.001	0.000
38000.- 40000.	5.	0.000	0.000	0.000
40000.- 42000.	2.	0.000	0.000	0.000
42000.- 44000.	0.	0.	0.	0.
44000.- 46000.	0.	0.	0.	0.
46000.- 48000.	0.	0.	0.	0.
48000.- 50000.	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
SELECTED LEVELS BY MONTHS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

NOVEMBER				
GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4051.- 6000.-	159.	0.465	0.252	0.120
6000.- 8000.-	158.	0.446	0.206	0.090
8000.- 10000.-	157.	0.376	0.162	0.058
10000.- 12000.-	156.	0.337	0.121	0.038
12000.- 14000.-	154.	0.270	0.089	0.022
14000.- 16000.-	150.	0.224	0.067	0.017
16000.- 18000.-	150.	0.154	0.049	0.008
18000.- 20000.-	150.	0.112	0.037	0.005
20000.- 22000.-	150.	0.094	0.028	0.007
22000.- 24000.-	153.	0.070	0.020	0.001
24000.- 26000.-	150.	0.046	0.014	0.002
26000.- 28000.-	143.	0.030	0.010	0.002
28000.- 30000.-	132.	0.019	0.006	0.001
30000.- 32000.-	108.	0.011	0.004	0.000
32000.- 34000.-	72.	0.006	0.002	0.000
34000.- 36000.-	30.	0.003	0.001	0.000
36000.- 38000.-	14.	0.001	0.000	0.000
38000.- 40000.-	3.	0.000	0.000	0.000
40000.- 42000.-	1.	0.000	0.000	0.000
42000.- 44000.-	1.	0.000	0.000	0.000
44000.- 46000.-	0.	0.	0.	0.
46000.- 48000.-	0.	0.	0.	0.
48000.- 50000.-	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

DECEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4051.- 6000.	147.	0.453	0.217	0.045
6000.- 8000.	147.	0.387	0.171	0.060
8000.- 10000.	148.	0.332	0.130	0.042
10000.- 12000.	146.	0.278	0.096	0.009
12000.- 14000.	144.	0.224	0.070	0.008
14000.- 16000.	140.	0.165	0.050	0.009
16000.- 18000.	136.	0.139	0.035	0.005
18000.- 20000.	134.	0.117	0.025	0.001
20000.- 22000.	130.	0.089	0.018	0.002
22000.- 24000.	129.	0.062	0.013	0.002
24000.- 26000.	126.	0.037	0.008	0.002
26000.- 28000.	119.	0.019	0.005	0.001
28000.- 30000.	94.	0.011	0.003	0.000
30000.- 32000.	49.	0.007	0.002	0.000
32000.- 34000.	15.	0.005	0.001	0.000
34000.- 36000.	4.	0.001	0.000	0.000
36000.- 38000.	2.	0.000	0.000	0.000
38000.- 40000.	0.	0.	0.	0.
40000.- 42000.	0.	0.	0.	0.
42000.- 44000.	0.	0.	0.	0.
44000.- 46000.	0.	0.	0.	0.
46000.- 48000.	0.	0.	0.	0.
48000.- 50000.	0.	0.	0.	0.

MEAN, MEDIAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

JANUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	117.	99.	36.	32.	17.
8000.	115.	99.	37.	32.	14.
10000.	115.	95.	34.	30.	14.
12000.	115.	89.	32.	28.	9.
14000.	114.	85.	29.	26.	2.
16000.	112.	80.	29.	27.	3.
18000.	113.	79.	29.	26.	4.
20000.	111.	69.	28.	26.	2.
22000.	111.	78.	28.	26.	1.
24000.	107.	60.	27.	26.	2.
26000.	102.	60.	25.	25.	2.
28000.	78.	58.	23.	22.	3.
30000.	54.	53.	17.	15.	2.
32000.	28.	40.	10.	8.	1.
34000.	10.	22.	7.	5.	1.
36000.	3.	3.	3.	3.	2.
38000.	0.	0.	0.	0.	0.
40000.	0.	0.	0.	0.	0.
42000.	0.	0.	0.	0.	0.
44000.	0.	0.	0.	0.	0.
46000.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.

MEAN, MEDIAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

FEBRUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	112.	77.	33.	33.	13.
8000.	112.	98.	35.	31.	12.
10000.	112.	99.	35.	31.	4.
12000.	111.	93.	31.	28.	4.
14000.	109.	91.	29.	25.	5.
16000.	108.	71.	26.	24.	6.
18000.	107.	71.	27.	24.	9.
20000.	107.	82.	28.	25.	7.
22000.	106.	87.	29.	25.	5.
24000.	104.	69.	29.	25.	1.
26000.	98.	65.	27.	25.	1.
28000.	84.	56.	22.	21.	2.
30000.	51.	46.	15.	14.	1.
32000.	21.	29.	10.	10.	1.
34000.	6.	20.	7.	5.	1.
36000.	2.	12.	7.	2.	1.
38000.	1.	4.	4.	4.	4.
40000.	0.	0.	0.	0.	0.
42000.	0.	0.	0.	0.	0.
44000.	0.	0.	0.	0.	0.
46000.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.

MEAN, MEDIAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

MARCH

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	161.	88.	30.	28.	13.
8000.	161.	99.	32.	29.	15.
10000.	160.	99.	33.	30.	11.
12000.	159.	81.	32.	30.	13.
14000.	159.	96.	31.	28.	10.
16000.	159.	83.	30.	27.	9.
18000.	158.	74.	30.	29.	4.
20000.	155.	69.	30.	27.	4.
22000.	153.	69.	30.	26.	1.
24000.	152.	69.	30.	26.	10.
26000.	142.	74.	30.	27.	4.
28000.	123.	59.	26.	26.	3.
30000.	96.	52.	22.	19.	1.
32000.	62.	43.	15.	13.	1.
34000.	32.	24.	11.	11.	1.
36000.	15.	15.	7.	7.	2.
38000.	5.	46.	12.	4.	1.
40000.	0.	0.	0.	0.	0.
42000.	0.	0.	0.	0.	0.
44000.	0.	0.	0.	0.	0.
46000.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.

MEAN, MEDIAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

APRIL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	139.	79.	28.	26.	10.
8000.	137.	68.	30.	29.	3.
10000.	136.	94.	31.	30.	11.
12000.	136.	98.	31.	30.	9.
14000.	137.	83.	29.	26.	9.
16000.	133.	99.	30.	25.	1.
18000.	135.	92.	29.	24.	3.
20000.	133.	88.	30.	24.	7.
22000.	132.	98.	31.	23.	1.
24000.	130.	99.	31.	25.	5.
26000.	128.	98.	30.	25.	2.
28000.	127.	90.	29.	25.	1.
30000.	117.	61.	24.	21.	1.
32000.	87.	49.	17.	14.	1.
34000.	50.	31.	11.	10.	1.
36000.	21.	25.	7.	5.	1.
38000.	6.	19.	6.	3.	1.
40000.	1.	13.	13.	13.	13.
42000.	1.	7.	7.	7.	7.
44000.	1.	1.	1.	1.	1.
46000.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.

MEAN, MEDIAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

MAY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	125.	74.	31.	29.	9.
8000.	126.	86.	32.	32.	10.
10000.	125.	84.	34.	35.	10.
12000.	125.	84.	35.	37.	10.
14000.	124.	98.	36.	37.	7.
16000.	120.	98.	38.	35.	3.
18000.	120.	98.	36.	34.	3.
20000.	120.	99.	33.	29.	2.
22000.	121.	99.	31.	28.	8.
24000.	120.	99.	32.	29.	8.
26000.	120.	85.	31.	28.	2.
28000.	120.	82.	30.	29.	8.
30000.	119.	78.	27.	26.	5.
32000.	108.	74.	20.	17.	3.
34000.	70.	45.	12.	10.	1.
36000.	32.	21.	6.	5.	1.
38000.	9.	6.	2.	3.	1.
40000.	0.	0.	0.	0.	0.
42000.	0.	0.	0.	0.	0.
44000.	0.	0.	0.	0.	0.
46000.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.

MEAN, MEDIAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

JUNE

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	128.	85.	34.	32.	8.
8000.	128.	99.	35.	34.	4.
10000.	128.	99.	37.	35.	1.
12000.	128.	94.	39.	37.	2.
14000.	127.	99.	41.	41.	6.
16000.	126.	99.	42.	42.	8.
18000.	124.	99.	39.	37.	2.
20000.	122.	99.	34.	32.	2.
22000.	122.	99.	31.	29.	3.
24000.	122.	65.	29.	27.	2.
26000.	119.	75.	30.	29.	6.
28000.	117.	87.	29.	29.	1.
30000.	109.	80.	29.	29.	1.
32000.	98.	61.	27.	26.	7.
34000.	89.	55.	19.	17.	1.
36000.	52.	38.	13.	11.	1.
38000.	28.	23.	8.	8.	1.
40000.	12.	11.	4.	3.	1.
42000.	1.	6.	6.	6.	6.
44000.	0.	0.	0.	0.	0.
46000.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.

MEAN, MEDIAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

JULY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	150.	80.	47.	46.	21.
8000.	150.	86.	50.	49.	27.
10000.	150.	87.	53.	52.	27.
12000.	150.	96.	57.	55.	15.
14000.	150.	99.	59.	59.	10.
16000.	149.	99.	61.	61.	16.
18000.	148.	99.	59.	60.	16.
20000.	147.	99.	55.	55.	3.
22000.	146.	98.	47.	45.	10.
24000.	146.	92.	41.	39.	10.
26000.	144.	98.	37.	36.	8.
28000.	142.	72.	36.	35.	1.
30000.	142.	67.	33.	34.	1.
32000.	136.	73.	33.	33.	1.
34000.	134.	60.	31.	32.	5.
36000.	121.	49.	22.	23.	1.
38000.	86.	31.	13.	13.	1.
40000.	46.	18.	8.	8.	1.
42000.	14.	12.	5.	5.	1.
44000.	3.	6.	4.	5.	1.
46000.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.

MEAN, MEDIAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

AUGUST

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	157.	87.	49.	50.	16.
8000.	157.	99.	52.	53.	4.
10000.	157.	96.	55.	54.	25.
12000.	157.	99.	57.	56.	24.
14000.	157.	99.	58.	56.	10.
16000.	156.	99.	59.	59.	10.
18000.	156.	99.	58.	59.	10.
20000.	156.	99.	50.	48.	10.
22000.	154.	99.	41.	38.	10.
24000.	154.	99.	37.	36.	4.
26000.	154.	93.	37.	36.	1.
28000.	150.	92.	35.	35.	6.
30000.	148.	95.	34.	34.	10.
32000.	148.	71.	33.	34.	3.
34000.	135.	67.	29.	31.	2.
36000.	93.	53.	19.	18.	1.
38000.	56.	37.	12.	13.	1.
40000.	24.	21.	8.	8.	2.
42000.	5.	5.	4.	5.	4.
44000.	0.	0.	0.	0.	0.
46000.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.

MEAN, MEDIAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

SEPTEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	122.	99.	52.	51.	18.
8000.	123.	99.	54.	53.	25.
10000.	123.	99.	56.	55.	29.
12000.	122.	99.	55.	55.	7.
14000.	122.	99.	54.	54.	9.
16000.	122.	99.	51.	50.	2.
18000.	118.	95.	44.	40.	10.
20000.	118.	92.	38.	33.	1.
22000.	116.	99.	36.	32.	3.
24000.	116.	92.	33.	31.	2.
26000.	117.	80.	33.	31.	6.
28000.	117.	74.	33.	31.	9.
30000.	117.	83.	34.	32.	7.
32000.	112.	76.	31.	31.	2.
34000.	89.	70.	24.	22.	1.
36000.	50.	46.	15.	14.	1.
38000.	22.	27.	12.	9.	1.
40000.	9.	13.	5.	4.	1.
42000.	1.	7.	7.	7.	7.
44000.	1.	2.	2.	2.	2.
46000.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.

MEAN, MEDIAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

OCTOBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	145.	89.	40.	37.	18.
8000.	145.	95.	42.	38.	17.
10000.	145.	99.	42.	37.	12.
12000.	145.	98.	39.	35.	5.
14000.	139.	94.	34.	31.	5.
16000.	136.	78.	29.	29.	1.
18000.	130.	67.	28.	27.	1.
20000.	126.	64.	27.	27.	8.
22000.	125.	78.	28.	28.	3.
24000.	125.	93.	29.	29.	3.
26000.	125.	92.	30.	29.	1.
28000.	123.	63.	31.	30.	10.
30000.	121.	65.	30.	30.	3.
32000.	110.	61.	22.	22.	1.
34000.	76.	46.	15.	12.	1.
36000.	35.	25.	11.	9.	1.
38000.	12.	16.	9.	8.	2.
40000.	5.	9.	6.	7.	1.
42000.	2.	2.	2.	2.	1.
44000.	0.	0.	0.	0.	0.
46000.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.

MEAN, MEDIAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

NOVEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	159.	99.	40.	38.	18.
8000.	159.	99.	41.	38.	13.
10000.	157.	99.	39.	35.	10.
12000.	156.	99.	36.	31.	10.
14000.	155.	99.	34.	30.	7.
16000.	150.	99.	33.	28.	8.
18000.	153.	91.	32.	28.	1.
20000.	152.	99.	34.	28.	9.
22000.	154.	99.	34.	29.	1.
24000.	153.	99.	36.	31.	6.
26000.	151.	98.	36.	32.	2.
28000.	143.	90.	36.	31.	2.
30000.	132.	85.	33.	30.	2.
32000.	109.	73.	24.	22.	2.
34000.	72.	72.	17.	15.	1.
36000.	30.	32.	12.	10.	1.
38000.	14.	24.	9.	5.	1.
40000.	3.	17.	10.	9.	4.
42000.	1.	11.	11.	11.	11.
44000.	1.	5.	5.	5.	5.
46000.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.

MEAN, MEDIAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY MONTHS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

DECEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	147.	98.	45.	43.	17.
8000.	148.	99.	45.	40.	13.
10000.	148.	99.	42.	35.	5.
12000.	145.	99.	37.	29.	1.
14000.	143.	99.	35.	29.	3.
16000.	139.	91.	30.	26.	2.
18000.	137.	93.	29.	27.	1.
20000.	133.	95.	31.	29.	2.
22000.	129.	94.	32.	29.	1.
24000.	128.	98.	32.	28.	3.
26000.	127.	84.	30.	28.	1.
28000.	118.	72.	28.	26.	2.
30000.	94.	60.	22.	19.	1.
32000.	49.	63.	15.	13.	1.
34000.	15.	27.	10.	9.	1.
36000.	4.	10.	6.	6.	2.
38000.	2.	3.	2.	2.	1.
40000.	0.	0.	0.	0.	0.
42000.	0.	0.	0.	0.	0.
44000.	0.	0.	0.	0.	0.
46000.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR RELATIVE HUMIDITIES

AT SELECTED LEVELS (IN PER CENT)

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

JANUARY

RELATIVE HUMIDITY (PER CENT)

TOTAL
OBSERVATIONS

GEOMETRIC ALTITUDE
MSL FEET

		≥ 10	≥ 20	≥ 30	≥ 40	≥ 50	≥ 60	≥ 70	≥ 80	≥ 90	≥ 100
		< 10	< 20	< 30	< 40	< 50	< 60	< 70	< 80	< 90	< 100
6000.	117.	0.	1.	36.	43.	9.	3.	5.	2.	0.	3.
8000.	115.	0.	2.	37.	37.	13.	3.	3.	3.	0.	3.
10000.	115.	0.	9.	42.	27.	10.	6.	2.	1.	1.	3.
12000.	115.	2.	14.	38.	24.	10.	2.	6.	2.	2.	0.
14000.	114.	4.	12.	47.	19.	10.	2.	4.	1.	1.	0.
16000.	112.	2.	13.	43.	25.	8.	4.	4.	0.	1.	0.
18000.	113.	2.	15.	49.	21.	6.	4.	1.	2.	0.	0.
20000.	111.	2.	12.	55.	17.	9.	3.	3.	0.	0.	0.
22000.	111.	3.	12.	54.	23.	5.	2.	2.	1.	0.	0.
24000.	107.	3.	12.	57.	17.	7.	4.	1.	0.	0.	0.
26000.	102.	6.	24.	43.	18.	5.	4.	1.	0.	0.	0.
28000.	78.	14.	23.	41.	12.	8.	3.	0.	0.	0.	0.
30000.	54.	35.	26.	26.	11.	0.	2.	0.	0.	0.	0.
32000.	28.	54.	39.	4.	0.	4.	0.	0.	0.	0.	0.
34000.	10.	70.	20.	10.	0.	0.	0.	0.	0.	0.	0.
36000.	3.	100.	0.	0.	0.	0.	0.	0.	0.	0.	0.
38000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
42000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
44000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
46000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR RELATIVE HUMIDITIES

AT SELECTED LEVELS (IN PER CENT)

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

FEBRUARY

RELATIVE HUMIDITY (PER CENT)

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	RELATIVE HUMIDITY (PER CENT)										
		<10	≥10 <20	≥20 <30	≥30 <40	≥40 <50	≥50 <60	≥60 <70	≥70 <80	≥80 <90	≥90 <100	≥100
6000.	112.	0.	4.	37.	34.	15.	6.	2.	1.	0.	0.	0.
8000.	112.	0.	5.	43.	18.	19.	10.	3.	1.	1.	1.	1.
10000.	112.	1.	16.	29.	25.	12.	7.	3.	5.	1.	1.	1.
12000.	111.	1.	26.	30.	19.	8.	5.	8.	3.	0.	1.	1.
14000.	109.	1.	26.	35.	23.	6.	6.	2.	0.	1.	1.	1.
16000.	108.	1.	34.	37.	19.	3.	2.	2.	3.	0.	0.	0.
18000.	107.	1.	30.	38.	17.	7.	1.	6.	1.	0.	0.	0.
20000.	107.	1.	20.	44.	25.	1.	4.	4.	1.	1.	0.	0.
22000.	105.	2.	18.	41.	23.	5.	8.	4.	0.	1.	0.	0.
24000.	104.	2.	17.	47.	12.	10.	9.	4.	0.	0.	0.	0.
26000.	98.	3.	21.	44.	16.	9.	4.	2.	0.	0.	0.	0.
28000.	84.	19.	29.	27.	12.	11.	2.	0.	0.	0.	0.	0.
30000.	51.	35.	35.	18.	8.	4.	0.	0.	0.	0.	0.	0.
32000.	21.	52.	38.	10.	0.	0.	0.	0.	0.	0.	0.	0.
34000.	6.	67.	17.	17.	0.	0.	0.	0.	0.	0.	0.	0.
36000.	2.	50.	50.	0.	0.	0.	0.	0.	0.	0.	0.	0.
38000.	1.	100.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
42000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
44000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
46000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR RELATIVE HUMIDITIES
AT SELECTED LEVELS (IN PER CENT)

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

MARCH

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	RELATIVE HUMIDITY (PER CENT)																		
		< 10	≥ 10 < 20	≥ 20 < 30	≥ 30 < 40	≥ 40 < 50	≥ 50 < 60	≥ 60 < 70	≥ 70 < 80	≥ 80 < 90	≥ 90 < 100	0.	1.	0.	1.	0.	1.	0.	1.	0.
6000.	161.	0.	13.	45.	26.	9.	4.	2.	0.	1.	0.	0.	1.	0.	1.	0.	1.	0.	1.	0.
8000.	161.	0.	1.	41.	26.	14.	4.	3.	0.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
10000.	160.	0.	9.	40.	27.	12.	5.	4.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
12000.	159.	0.	18.	33.	24.	12.	7.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.
14000.	159.	0.	21.	33.	24.	13.	4.	3.	4.	0.	1.	1.	0.	1.	0.	1.	0.	1.	0.	1.
16000.	159.	1.	23.	33.	23.	8.	7.	3.	3.	7.	1.	3.	1.	1.	0.	0.	0.	0.	0.	0.
18000.	158.	1.	23.	31.	26.	11.	4.	4.	4.	4.	0.	3.	1.	0.	0.	0.	0.	0.	0.	0.
20000.	155.	1.	16.	37.	25.	11.	7.	7.	7.	7.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.
22000.	153.	1.	10.	48.	23.	8.	7.	8.	8.	8.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.
24000.	152.	0.	13.	48.	18.	9.	8.	9.	9.	11.	1.	3.	0.	0.	0.	0.	0.	0.	0.	0.
26000.	142.	2.	14.	44.	15.	12.	11.	12.	12.	11.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
28000.	123.	11.	14.	38.	15.	13.	11.	13.	13.	11.	9.	3.	0.	0.	0.	0.	0.	0.	0.	0.
30000.	96.	18.	35.	18.	15.	11.	3.	2.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
32000.	62.	40.	26.	19.	13.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
34000.	32.	44.	44.	13.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
36000.	15.	73.	27.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
38000.	5.	80.	0.	0.	0.	20.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
42000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
44000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
46000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR RELATIVE HUMIDITIES

AT SELECTED LEVELS (IN PER CENT)

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

APRIL

RELATIVE HUMIDITY (PER CENT)

GEOMETRIC ALTITUDE
MSL FEET

TOTAL
OBSERVATIONS

RELATIVE HUMIDITY (PER CENT)

		<10	≥10	<20	≥20	<30	≥30	<40	≥40	<50	≥50	<60	≥60	<70	≥70	<80	≥80	<90	≥90
6000.	139.	0.	26.	39.	20.	9.	4.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	0.
8000.	137.	1.	17.	35.	30.	10.	4.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	136.	0.	15.	35.	29.	15.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.
12000.	136.	1.	18.	32.	26.	15.	4.	2.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
14000.	135.	1.	28.	29.	19.	13.	6.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	0.
16000.	133.	1.	33.	29.	14.	11.	5.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	2.
18000.	125.	2.	28.	36.	13.	7.	7.	3.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
20000.	133.	1.	29.	32.	13.	11.	8.	4.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	0.
22000.	132.	2.	27.	36.	11.	11.	4.	4.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.
24000.	130.	1.	22.	42.	15.	9.	3.	3.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	2.
26000.	128.	1.	17.	48.	16.	7.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	1.
28000.	127.	3.	21.	40.	16.	9.	8.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
30000.	117.	13.	32.	23.	15.	11.	4.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
32000.	87.	31.	38.	11.	17.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
34000.	50.	50.	3/4.	12.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
36000.	21.	67.	29.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
38000.	6.	83.	17.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40000.	1.	0.	100.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
42000.	1.	100.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
44000.	1.	100.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
46000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR RELATIVE HUMIDITIES

AT SELECTED LEVELS (IN PER CENT)

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

MAY

RELATIVE HUMIDITY (PER CENT)

TOTAL
OBSERVATIONS

GEOMETRIC ALTITUDE
MSL FEET

		< 10	≥ 10	< 20	≥ 20	< 30	≥ 30	< 40	≥ 40	< 50	≥ 50	< 60	≥ 60	< 70	≥ 70	< 80	≥ 80	< 90	≥ 90
6000.	125.	1.	30.	23.	17.	18.	10.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	126.	0.	23.	24.	27.	11.	13.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	125.	0.	18.	21.	27.	22.	10.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	125.	0.	14.	24.	21.	30.	10.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	124.	2.	15.	16.	22.	25.	13.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	120.	2.	17.	17.	23.	14.	12.	9.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	120.	2.	16.	25.	24.	11.	7.	6.	6.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.
20000.	120.	2.	19.	32.	22.	9.	3.	5.	5.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.
22000.	121.	2.	21.	35.	21.	7.	6.	7.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
24000.	120.	1.	18.	34.	22.	11.	8.	11.	14.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.
26000.	120.	2.	19.	32.	22.	14.	5.	14.	18.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
28000.	120.	1.	20.	30.	24.	18.	4.	18.	12.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30000.	119.	3.	29.	27.	24.	12.	4.	24.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
32000.	108.	18.	43.	20.	8.	6.	5.	8.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
34000.	70.	51.	30.	10.	7.	1.	0.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
36000.	32.	78.	16.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
38000.	9.	100.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
42000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
44000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
46000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR RELATIVE HUMIDITIES

AT SELECTED LEVELS (IN PER CENT)

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

JUNE

RELATIVE HUMIDITY (PER CENT)

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	RELATIVE HUMIDITY (PER CENT)																	
		< 10	≥ 10 < 20	≥ 20 < 30	≥ 30 < 40	≥ 40 < 50	≥ 50 < 60	≥ 60 < 70	≥ 70 < 80	≥ 80 < 90	≥ 90								
6000.	128.	1.	17.	26.	24.	14.	12.	4.	1.	2.	0.								
8000.	128.	1.	12.	23.	29.	20.	9.	4.	1.	0.	2.								
10000.	128.	1.	10.	23.	27.	22.	8.	5.	2.	1.	0.								
12000.	128.	1.	9.	19.	27.	23.	10.	7.	1.	1.	1.								
14000.	127.	1.	10.	14.	22.	27.	13.	6.	6.	1.	1.								
16000.	126.	1.	16.	12.	17.	21.	17.	7.	3.	3.	3.								
18000.	124.	1.	21.	21.	13.	18.	12.	6.	3.	2.	2.								
20000.	122.	2.	20.	25.	22.	17.	6.	2.	2.	2.	2.								
22000.	122.	3.	20.	30.	24.	13.	5.	3.	0.	0.	0.								
24000.	122.	2.	16.	39.	25.	10.	5.	3.	0.	0.	0.								
26000.	119.	2.	13.	40.	28.	10.	4.	0.	3.	0.	0.								
28000.	117.	3.	13.	41.	27.	11.	3.	1.	1.	1.	0.								
30000.	109.	3.	12.	41.	32.	6.	3.	3.	0.	1.	0.								
32000.	98.	3.	21.	40.	28.	4.	2.	2.	0.	0.	0.								
34000.	89.	22.	38.	24.	9.	6.	1.	0.	0.	0.	0.								
36000.	52.	44.	40.	10.	6.	0.	0.	0.	0.	0.	0.								
38000.	28.	61.	32.	7.	0.	0.	0.	0.	0.	0.	0.								
40000.	12.	83.	17.	0.	0.	0.	0.	0.	0.	0.	0.								
42000.	1.	100.	0.	0.	0.	0.	0.	0.	0.	0.	0.								
44000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.								
46000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.								
48000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.								
50000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.								

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR RELATIVE HUMIDITIES

AT SELECTED LEVELS (IN PER CENT)

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

JULY

RELATIVE HUMIDITY (PER CENT)

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	RELATIVE HUMIDITY (PER CENT)																		
		< 10	≥ 10	< 20	≥ 20	< 30	≥ 30	< 40	≥ 40	< 50	≥ 50	< 60	≥ 60	< 70	≥ 70	< 80	≥ 80	< 90	≥ 90	< 100
6000.	150.	0.	0.	0.	0.	4.	19.	43.	19.	11.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	150.	0.	0.	0.	2.	11.	43.	27.	11.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	150.	0.	0.	0.	1.	6.	33.	33.	21.	4.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	150.	0.	1.	0.	0.	5.	23.	34.	19.	13.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	150.	0.	1.	0.	3.	5.	14.	33.	23.	13.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	149.	0.	1.	0.	2.	6.	13.	26.	26.	14.	8.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	148.	0.	2.	0.	3.	11.	15.	19.	22.	14.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20000.	147.	1.	3.	0.	6.	12.	20.	16.	17.	14.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.
22000.	146.	0.	4.	0.	14.	22.	18.	16.	13.	6.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
24000.	146.	0.	6.	0.	25.	23.	16.	16.	10.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
26000.	144.	1.	6.	0.	28.	26.	17.	13.	6.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
28000.	142.	2.	6.	0.	26.	32.	19.	11.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30000.	142.	4.	4.	0.	29.	40.	17.	4.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
32000.	136.	2.	6.	0.	24.	49.	13.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
34000.	134.	1.	7.	0.	33.	44.	10.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
36000.	121.	12.	24.	0.	45.	13.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
38000.	86.	30.	51.	0.	17.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40000.	46.	65.	35.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
42000.	14.	86.	14.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
44000.	3.	100.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
46000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR RELATIVE HUMIDITIES

AT SELECTED LEVELS (IN PER CENT)

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

AUGUST

RELATIVE HUMIDITY (PER CENT)

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	RELATIVE HUMIDITY (PER CENT)										
		< 10	≥ 10 < 20	≥ 20 < 30	≥ 30 < 40	≥ 40 < 50	≥ 50 < 60	≥ 60 < 70	≥ 70 < 80	≥ 80 < 90	≥ 90 < 100	≥ 100
6000.	157.	0.	3.	3.	15.	27.	33.	15.	3.	1.	0.	0.
8000.	157.	1.	1.	5.	10.	23.	38.	15.	6.	1.	1.	1.
10000.	157.	0.	0.	4.	7.	24.	31.	19.	11.	1.	2.	2.
12000.	157.	0.	0.	2.	10.	18.	32.	15.	13.	7.	3.	3.
14000.	157.	0.	1.	2.	7.	18.	32.	17.	11.	5.	6.	6.
16000.	156.	0.	1.	5.	6.	15.	24.	22.	13.	8.	6.	6.
18000.	156.	0.	3.	5.	12.	11.	20.	21.	15.	5.	8.	8.
20000.	156.	0.	7.	9.	17.	22.	15.	10.	8.	6.	7.	7.
22000.	154.	0.	12.	16.	29.	16.	12.	5.	5.	3.	3.	3.
24000.	154.	1.	18.	12.	32.	20.	7.	3.	3.	2.	2.	1.
26000.	154.	1.	15.	16.	31.	19.	12.	1.	2.	3.	3.	1.
28000.	150.	1.	14.	23.	30.	17.	7.	2.	3.	2.	1.	1.
30000.	148.	0.	12.	23.	36.	18.	5.	1.	5.	0.	1.	1.
32000.	148.	5.	9.	20.	44.	14.	3.	5.	1.	0.	0.	0.
34000.	135.	10.	13.	23.	34.	16.	3.	2.	0.	0.	0.	0.
36000.	93.	20.	32.	27.	15.	4.	1.	0.	0.	0.	0.	0.
38000.	56.	37.	46.	12.	4.	0.	0.	0.	0.	0.	0.	0.
40000.	24.	71.	25.	4.	0.	0.	0.	0.	0.	0.	0.	0.
42000.	5.	100.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
44000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
46000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR RELATIVE HUMIDITIES

AT SELECTED LEVELS (IN PER CENT)

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

SEPTEMBER

RELATIVE HUMIDITY (PER CENT)

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	RELATIVE HUMIDITY (PER CENT)									
		<10	≥10 <20	≥20 <30	≥30 <40	≥40 <50	≥50 <60	≥60 <70	≥70 <80	≥80 <90	≥90
6000.	122.	0.	1.	2.	16.	25.	30.	16.	4.	2.	3.
8000.	123.	0.	0.	1.	12.	26.	32.	15.	8.	2.	3.
10000.	123.	0.	0.	1.	8.	28.	33.	15.	9.	4.	3.
12000.	122.	1.	2.	2.	7.	22.	34.	18.	7.	3.	3.
14000.	122.	1.	2.	3.	11.	20.	27.	19.	9.	4.	3.
16000.	122.	2.	3.	10.	14.	20.	19.	13.	8.	2.	7.
18000.	118.	0.	8.	21.	21.	18.	10.	6.	8.	3.	3.
20000.	118.	3.	8.	31.	25.	9.	8.	7.	5.	5.	1.
22000.	116.	1.	14.	28.	28.	9.	7.	7.	2.	4.	1.
24000.	116.	2.	15.	31.	29.	8.	7.	3.	3.	2.	2.
26000.	117.	1.	12.	34.	30.	10.	6.	2.	4.	1.	0.
28000.	117.	1.	12.	33.	32.	6.	8.	5.	3.	0.	0.
30000.	117.	1.	10.	30.	35.	10.	8.	3.	3.	1.	0.
32000.	112.	4.	12.	26.	34.	16.	3.	4.	1.	0.	0.
34000.	89.	17.	27.	25.	17.	10.	1.	2.	1.	0.	0.
36000.	50.	38.	30.	22.	2.	8.	0.	0.	0.	0.	0.
38000.	22.	59.	23.	18.	0.	0.	0.	0.	0.	0.	0.
40000.	9.	78.	22.	0.	0.	0.	0.	0.	0.	0.	0.
42000.	1.	100.	0.	0.	0.	0.	0.	0.	0.	0.	0.
44000.	1.	100.	0.	0.	0.	0.	0.	0.	0.	0.	0.
46000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR RELATIVE HUMIDITIES

AT SELECTED LEVELS (IN PER CENT)

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

OCTOBER

RELATIVE HUMIDITY (PER CENT)

GEOMETRIC ALTITUDE
MSL FEET

TOTAL
OBSERVATIONS

< 10 ≥ 10 < 20 ≥ 20 < 30 ≥ 30 < 40 ≥ 40 < 50 ≥ 50 < 60 ≥ 60 < 70 ≥ 70 < 80 ≥ 80 < 90 ≥ 90 < 100 ≥ 100

6000.
8000.
10000.
12000.
14000.
16000.
18000.
20000.
22000.
24000.
26000.
28000.
30000.
32000.
34000.
36000.
38000.
40000.
42000.
44000.
46000.
48000.
50000.

145.
145.
145.
145.
139.
136.
130.
126.
125.
125.
125.
123.
121.
110.
76.
35.
12.
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RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR RELATIVE HUMIDITIES

AT SELECTED LEVELS (IN PER CENT)

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

NOVEMBER

RELATIVE HUMIDITY (PER CENT)

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	RELATIVE HUMIDITY (PER CENT)										
		< 10	≥ 10 < 20	≥ 20 < 30	≥ 30 < 40	≥ 40 < 50	≥ 50 < 60	≥ 60 < 70	≥ 70 < 80	≥ 80 < 90	≥ 90 < 100	
6000.	159.	0.	1.	13.	47.	21.	9.	5.	1.	1.	2.	
8000.	159.	0.	5.	18.	35.	19.	3.	4.	3.	1.	3.	
10000.	157.	0.	9.	24.	32.	13.	9.	4.	4.	3.	3.	
12000.	156.	0.	16.	31.	24.	12.	4.	2.	3.	1.	6.	
14000.	155.	1.	16.	35.	24.	10.	4.	3.	1.	2.	5.	
16000.	150.	1.	16.	41.	19.	7.	7.	3.	1.	2.	3.	
18000.	153.	2.	14.	39.	24.	8.	7.	1.	3.	1.	2.	
20000.	152.	1.	11.	46.	16.	11.	5.	3.	3.	3.	1.	
22000.	154.	1.	9.	42.	24.	7.	6.	1.	4.	3.	2.	
24000.	153.	2.	7.	37.	27.	8.	6.	2.	6.	1.	3.	
26000.	151.	2.	7.	34.	30.	8.	6.	3.	5.	1.	3.	
28000.	143.	1.	6.	36.	27.	12.	8.	6.	2.	2.	1.	
30000.	132.	2.	14.	35.	24.	11.	8.	4.	2.	1.	0.	
32000.	109.	17.	28.	23.	15.	10.	6.	1.	1.	0.	0.	
34000.	72.	33.	32.	17.	11.	6.	0.	0.	1.	0.	0.	
36000.	30.	47.	33.	10.	10.	0.	0.	0.	0.	0.	0.	
38000.	14.	64.	29.	7.	0.	0.	0.	0.	0.	0.	0.	
40000.	3.	67.	33.	0.	0.	0.	0.	0.	0.	0.	0.	
42000.	1.	0.	100.	0.	0.	0.	0.	0.	0.	0.	0.	
44000.	1.	100.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
46000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
48000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
50000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR RELATIVE HUMIDITIES

AT SELECTED LEVELS (IN PER CENT)

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

DECEMBER

RELATIVE HUMIDITY (PER CENT)

GEOMETRIC ALTITUDE
MSL FEET

TOTAL
OBSERVATIONS

<10 >10 >20 >30 >40 >50 >60 >70 >80 >90 >100

6000.
8000.
10000.
12000.
14000.
16000.
18000.
20000.
22000.
24000.
26000.
28000.
30000.
32000.
34000.
36000.
38000.
40000.
42000.
44000.
46000.
48000.
50000.

147.
148.
148.
145.
143.
139.
137.
133.
129.
128.
127.
118.
94.
49.
15.
4.
2.
0.
0.
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0.
0.
3.
4.
3.
4.
3.
2.
2.
2.
5.
7.
20.
45.
60.
75.
100.
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1.
5.
19.
23.
26.
26.
22.
17.
13.
13.
14.
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34.
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25.
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43.
36.
18.
16.
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MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY SEASONS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

WINTER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	375.	6.779	2.590	0.643
8000.	374.	6.354	2.200	0.532
10000.	376.	5.725	1.744	0.178
12000.	372.	5.140	1.355	0.029
14000.	367.	4.138	1.040	0.083
16000.	360.	3.413	0.792	0.084
18000.	358.	3.226	0.603	0.025
20000.	352.	2.693	0.469	0.030
22000.	347.	2.178	0.350	0.009
24000.	340.	1.534	0.255	0.004
26000.	328.	1.570	0.175	0.001
28000.	281.	0.459	0.114	0.005
30000.	199.	0.304	0.067	0.002
32000.	98.	0.294	0.032	0.001
34000.	31.	0.078	0.015	0.001
36000.	9.	0.016	0.006	0.001
38000.	3.	0.003	0.002	0.001
40000.	0.	0.	0.	0.
42000.	0.	0.	0.	0.
44000.	0.	0.	0.	0.
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY SEASONS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	SPRING			MINIMUM
	TOTAL OBSERVATIONS	MAXIMUM	MEAN	
6000.	425.	11.348	3.402	0.535
8000.	424.	8.474	2.867	0.276
10000.	421.	6.513	2.340	0.277
12000.	420.	6.457	1.847	0.375
14000.	418.	6.099	1.437	0.175
16000.	412.	5.233	1.132	0.030
18000.	413.	4.464	0.846	0.082
20000.	408.	3.857	0.635	0.046
22000.	406.	3.339	0.474	0.008
24000.	402.	2.875	0.356	0.023
26000.	390.	1.512	0.253	0.004
28000.	370.	1.091	0.174	0.003
30000.	332.	0.657	0.109	0.002
32000.	257.	0.383	0.058	0.001
34000.	152.	0.214	0.026	0.001
36000.	68.	0.046	0.009	0.001
38000.	20.	0.030	0.005	0.000
40000.	1.	0.018	0.018	0.018
42000.	1.	0.008	0.008	0.008
44000.	1.	0.001	0.001	0.001
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY SEASONS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	SUMMER		MEAN	MINIMUM
	TOTAL OBSERVATIONS	MAXIMUM		
6000.	434.	14.642	8.609	1.326
8000.	430.	11.772	7.413	0.570
10000.	433.	9.879	6.267	0.121
12000.	433.	9.393	5.219	0.137
14000.	432.	8.404	4.249	0.415
16000.	429.	6.152	3.417	0.448
18000.	424.	5.399	2.632	0.103
20000.	422.	4.302	1.900	0.052
22000.	420.	3.351	1.323	0.087
24000.	420.	2.628	0.928	0.043
26000.	415.	2.068	0.687	0.017
28000.	407.	1.444	0.485	0.008
30000.	399.	1.012	0.339	0.005
32000.	380.	0.680	0.233	0.008
34000.	356.	0.436	0.145	0.002
36000.	265.	0.266	0.074	0.001
38000.	170.	0.121	0.031	0.001
40000.	82.	0.043	0.012	0.001
42000.	20.	0.016	0.005	0.001
44000.	3.	0.005	0.003	0.001
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY SEASONS
 JALLEN SITE (JALI)
 PERIOD OF RECORD 1962-1967

FALL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
6000.	423.	12.021	5.490	1.727
8000.	426.	11.013	4.753	0.814
10000.	425.	9.568	3.918	0.630
12000.	422.	8.408	3.038	0.275
14000.	415.	6.615	1.317	0.279
16000.	407.	5.621	1.772	0.048
18000.	400.	4.806	1.312	0.050
20000.	396.	3.518	1.011	0.042
22000.	395.	2.864	0.768	0.015
24000.	394.	2.382	0.575	0.052
26000.	393.	1.812	0.423	0.012
28000.	383.	1.286	0.305	0.018
30000.	369.	0.918	0.213	0.009
32000.	331.	0.568	0.130	0.002
34000.	237.	0.377	0.073	0.001
36000.	115.	0.285	0.038	0.001
38000.	48.	0.124	0.021	0.001
40000.	17.	0.025	0.008	0.001
42000.	4.	0.009	0.004	0.001
44000.	2.	0.002	0.001	0.001
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY SEASONS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

WINTER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4051.- 6000.	353.	0.485	0.180	0.045
6000.- 8000.	373.	0.387	0.141	0.038
8000.- 10000.	374.	0.332	0.109	0.020
10000.- 12000.	371.	0.278	0.081	0.009
12000.- 14000.	367.	0.224	0.050	0.008
14000.- 16000.	358.	0.165	0.042	0.004
16000.- 18000.	355.	0.139	0.030	0.005
18000.- 20000.	352.	0.117	0.022	0.001
20000.- 22000.	345.	0.089	0.015	0.002
22000.- 24000.	339.	0.062	0.011	0.001
24000.- 26000.	326.	0.037	0.007	0.001
26000.- 28000.	281.	0.026	0.005	0.001
28000.- 30000.	199.	0.011	0.003	0.000
30000.- 32000.	98.	0.007	0.002	0.000
32000.- 34000.	31.	0.005	0.001	0.000
34000.- 36000.	9.	0.001	0.000	0.000
36000.- 38000.	3.	0.000	0.000	0.000
38000.- 40000.	0.	0.	0.	0.
40000.- 42000.	0.	0.	0.	0.
42000.- 44000.	0.	0.	0.	0.
44000.- 46000.	0.	0.	0.	0.
46000.- 48000.	0.	0.	0.	0.
48000.- 50000.	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY SEASONS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

SPRING

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4051.- 6000.-	414.	0.678	0.222	0.063
6000.- 8000.-	421.	0.556	0.180	0.029
8000.- 10000.-	421.	0.359	0.141	0.020
10000.- 12000.-	419.	0.312	0.107	0.018
12000.- 14000.-	417.	0.300	0.079	0.017
14000.- 16000.-	410.	0.254	0.058	0.007
16000.- 18000.-	410.	0.202	0.042	0.005
18000.- 20000.-	407.	0.162	0.030	0.003
20000.- 22000.-	405.	0.132	0.021	0.001
22000.- 24000.-	399.	0.106	0.015	0.001
24000.- 26000.-	389.	0.071	0.010	0.001
26000.- 28000.-	369.	0.040	0.007	0.001
28000.- 30000.-	332.	0.025	0.004	0.001
30000.- 32000.-	257.	0.014	0.003	0.000
32000.- 34000.-	152.	0.007	0.001	0.000
34000.- 36000.-	68.	0.002	0.001	0.000
36000.- 38000.-	20.	0.001	0.000	0.000
38000.- 40000.-	1.	0.000	0.000	0.000
40000.- 42000.-	1.	0.000	0.000	0.000
42000.- 44000.-	1.	0.000	0.000	0.000
44000.- 46000.-	0.	0.	0.	0.
46000.- 48000.-	0.	0.	0.	0.
48000.- 50000.-	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY SEASONS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	SUMMER			MINIMUM
	TOTAL OBSERVATIONS	MAXIMUM	MEAN	
4051.- 6000.	430.	0.898	0.529	0.094
6000.- 8000.	430.	0.722	0.449	0.053
8000.- 10000.	430.	0.559	0.362	0.018
10000.- 12000.	433.	0.473	0.288	0.008
12000.- 14000.	432.	0.398	0.224	0.014
14000.- 16000.	428.	0.321	0.171	0.023
16000.- 18000.	423.	0.238	0.127	0.012
18000.- 20000.	421.	0.188	0.090	0.015
20000.- 22000.	418.	0.138	0.060	0.004
22000.- 24000.	419.	0.101	0.039	0.003
24000.- 26000.	414.	0.072	0.026	0.002
26000.- 28000.	404.	0.051	0.018	0.003
28000.- 30000.	397.	0.034	0.012	0.001
30000.- 32000.	377.	0.022	0.008	0.001
32000.- 34000.	356.	0.014	0.005	0.001
34000.- 36000.	264.	0.008	0.003	0.000
36000.- 38000.	170.	0.004	0.001	0.000
38000.- 40000.	82.	0.002	0.001	0.000
40000.- 42000.	20.	0.001	0.000	0.000
42000.- 44000.	3.	0.000	0.000	0.000
44000.- 46000.	0.	0.	0.	0.
46000.- 48000.	0.	0.	0.	0.
48000.- 50000.	0.	0.	0.	0.

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY SEASONS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	FALL			
	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4051.- 6000.	422.	0.748	0.355	0.120
6000.- 8000.	422.	0.643	0.293	0.090
8000.- 10000.	424.	0.547	0.234	0.058
10000.- 12000.	422.	0.446	0.177	0.038
12000.- 14000.	413.	0.345	0.129	0.022
14000.- 16000.	407.	0.269	0.092	0.012
16000.- 18000.	397.	0.211	0.066	0.006
18000.- 20000.	389.	0.157	0.046	0.005
20000.- 22000.	389.	0.117	0.033	0.003
22000.- 24000.	392.	0.090	0.023	0.001
24000.- 26000.	388.	0.068	0.016	0.002
26000.- 28000.	382.	0.047	0.011	0.002
28000.- 30000.	369.	0.031	0.007	0.001
30000.- 32000.	328.	0.020	0.005	0.001
32000.- 34000.	237.	0.011	0.003	0.000
34000.- 36000.	115.	0.008	0.002	0.000
36000.- 38000.	48.	0.004	0.001	0.000
38000.- 40000.	17.	0.001	0.000	0.000
40000.- 42000.	4.	0.000	0.000	0.000
42000.- 44000.	2.	0.000	0.000	0.000
44000.- 46000.	0.	0.	0.	0.
46000.- 48000.	0.	0.	0.	0.
48000.- 50000.	0.	0.	0.	0.

MEAN, MEDIAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY SEASONS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

WINTER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	376.	99.	39.	35.	13.
8000.	375.	99.	39.	34.	12.
10000.	375.	99.	37.	32.	4.
12000.	371.	99.	34.	28.	1.
14000.	366.	99.	31.	27.	2.
16000.	359.	91.	29.	25.	2.
18000.	357.	93.	28.	25.	1.
20000.	351.	95.	29.	26.	2.
22000.	346.	94.	30.	27.	1.
24000.	339.	98.	30.	26.	1.
26000.	327.	84.	27.	25.	1.
28000.	280.	72.	25.	24.	2.
30000.	199.	60.	19.	17.	1.
32000.	98.	63.	12.	11.	1.
34000.	31.	27.	8.	7.	1.
36000.	9.	12.	5.	4.	1.
38000.	3.	4.	3.	3.	1.
40000.	0.	0.	0.	0.	0.
42000.	0.	0.	0.	0.	0.
44000.	0.	0.	0.	0.	0.
46000.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.

MEAN MEDIAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY SEASONS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

SPRING

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	425.	88.	30.	28.	9.
8000.	424.	99.	32.	30.	3.
10000.	421.	99.	33.	31.	10.
12000.	420.	98.	33.	31.	9.
14000.	418.	98.	32.	30.	7.
16000.	412.	99.	32.	29.	1.
18000.	413.	98.	31.	28.	3.
20000.	408.	99.	31.	27.	2.
22000.	406.	99.	30.	26.	1.
24000.	402.	99.	31.	26.	5.
26000.	390.	98.	30.	27.	2.
28000.	370.	90.	29.	26.	1.
30000.	332.	78.	25.	23.	1.
32000.	257.	74.	18.	15.	1.
34000.	152.	45.	12.	10.	1.
36000.	68.	25.	7.	6.	1.
38000.	20.	46.	6.	3.	1.
40000.	1.	13.	13.	13.	13.
42000.	1.	7.	7.	7.	7.
44000.	1.	1.	1.	1.	1.
46000.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.

MEAN, MEDIAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY SEASONS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

SUMMER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	435.	87.	44.	45.	8.
8000.	435.	99.	46.	47.	4.
10000.	435.	99.	49.	50.	1.
12000.	435.	99.	52.	51.	2.
14000.	434.	99.	54.	54.	6.
16000.	431.	99.	55.	55.	8.
18000.	428.	99.	53.	54.	2.
20000.	425.	99.	47.	45.	2.
22000.	422.	99.	40.	37.	3.
24000.	422.	99.	36.	35.	2.
26000.	417.	98.	35.	34.	1.
28000.	409.	92.	33.	33.	1.
30000.	399.	95.	32.	32.	1.
32000.	382.	73.	31.	32.	1.
34000.	358.	67.	27.	29.	1.
36000.	266.	53.	19.	20.	1.
38000.	170.	37.	12.	12.	1.
40000.	82.	21.	7.	7.	1.
42000.	20.	12.	5.	5.	1.
44000.	3.	6.	4.	5.	1.
46000.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.

MEAN, MEDIAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY SEASONS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

FALL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MEDIAN	MINIMUM
6000.	426.	99.	44.	40.	18.
8000.	427.	99.	45.	41.	13.
10000.	425.	99.	45.	41.	10.
12000.	423.	99.	42.	39.	5.
14000.	416.	99.	40.	35.	5.
16000.	408.	99.	37.	32.	1.
18000.	401.	95.	34.	30.	1.
20000.	396.	99.	33.	29.	1.
22000.	395.	99.	33.	30.	1.
24000.	394.	99.	33.	30.	2.
26000.	393.	98.	33.	31.	1.
28000.	383.	90.	33.	31.	2.
30000.	370.	85.	32.	30.	2.
32000.	331.	76.	26.	25.	1.
34000.	237.	72.	19.	16.	1.
36000.	115.	46.	13.	11.	1.
38000.	48.	27.	10.	9.	1.
40000.	17.	17.	6.	6.	1.
42000.	4.	11.	5.	4.	1.
44000.	2.	5.	4.	4.	2.
46000.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR RELATIVE HUMIDITIES

AT SELECTED LEVELS (IN PER CENT)

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

WINTER

RELATIVE HUMIDITY (PER CENT)

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	RELATIVE HUMIDITY (PER CENT)										
		< 10	≥ 10 < 20	≥ 20 < 30	≥ 30 < 40	≥ 40 < 50	≥ 50 < 60	≥ 60 < 70	≥ 70 < 80	≥ 80 < 90	≥ 90 < 100	
6000.	376.	0.	2.	30.	33.	16.	10.	4.	3.	1.	2.	
8000.	375.	0.	4.	32.	27.	15.	9.	5.	4.	2.	3.	
10000.	375.	2.	15.	29.	22.	10.	6.	5.	5.	2.	4.	
12000.	371.	2.	21.	30.	19.	9.	4.	6.	3.	2.	3.	
14000.	366.	2.	22.	34.	21.	8.	4.	3.	2.	2.	2.	
16000.	359.	2.	25.	37.	19.	7.	4.	2.	2.	1.	0.	
18000.	357.	2.	22.	42.	19.	8.	3.	2.	1.	0.	1.	
20000.	351.	1.	16.	46.	21.	8.	3.	3.	1.	1.	0.	
22000.	346.	2.	14.	45.	22.	8.	5.	3.	1.	1.	0.	
24000.	339.	2.	14.	47.	17.	10.	5.	2.	1.	1.	0.	
26000.	327.	5.	19.	43.	18.	8.	4.	2.	1.	0.	0.	
28000.	280.	12.	23.	35.	16.	9.	4.	0.	0.	0.	0.	
30000.	199.	28.	32.	20.	11.	5.	4.	1.	0.	0.	0.	
32000.	98.	49.	34.	11.	3.	2.	0.	1.	0.	0.	0.	
34000.	31.	65.	26.	10.	0.	0.	0.	0.	0.	0.	0.	
36000.	9.	78.	22.	0.	0.	0.	0.	0.	0.	0.	0.	
38000.	3.	100.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
40000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
42000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
44000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
46000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
48000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
50000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR RELATIVE HUMIDITIES

AT SELECTED LEVELS (IN PER CENT)

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

SPRING

RELATIVE HUMIDITY (PER CENT)

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	RELATIVE HUMIDITY (PER CENT)										
		< 10	≥ 10 < 20	≥ 20 < 30	≥ 30 < 40	≥ 40 < 50	≥ 50 < 60	≥ 60 < 70	≥ 70 < 80	≥ 80 < 90	≥ 90 < 100	≥ 100
6000.	425.	0.	22.	36.	21.	12.	6.	2.	0.	0.	0.	0.
8000.	424.	0.	16.	34.	28.	12.	7.	2.	0.	0.	0.	0.
10000.	421.	0.	13.	33.	28.	16.	6.	3.	0.	1.	0.	0.
12000.	420.	0.	17.	30.	24.	18.	7.	2.	1.	0.	0.	0.
14000.	418.	1.	22.	27.	22.	16.	7.	4.	1.	0.	0.	0.
16000.	412.	1.	25.	27.	20.	11.	8.	5.	1.	0.	1.	1.
18000.	413.	2.	23.	31.	21.	10.	6.	4.	2.	1.	1.	1.
20000.	408.	1.	22.	34.	20.	10.	6.	3.	1.	1.	0.	0.
22000.	406.	1.	19.	40.	18.	9.	6.	3.	1.	0.	1.	1.
24000.	402.	0.	17.	42.	18.	10.	6.	4.	1.	0.	1.	1.
26000.	390.	2.	17.	42.	17.	11.	8.	2.	1.	1.	0.	0.
28000.	370.	5.	18.	36.	18.	14.	7.	1.	0.	0.	0.	0.
30000.	332.	11.	32.	23.	18.	11.	4.	1.	0.	0.	0.	0.
32000.	257.	28.	37.	17.	12.	4.	2.	0.	0.	0.	0.	0.
34000.	152.	49.	35.	11.	4.	1.	0.	0.	0.	0.	0.	0.
36000.	68.	74.	22.	4.	0.	0.	0.	0.	0.	0.	0.	0.
38000.	20.	90.	5.	0.	0.	5.	0.	0.	0.	0.	0.	0.
40000.	1.	0.	100.	0.	0.	0.	0.	0.	0.	0.	0.	0.
42000.	1.	100.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
44000.	1.	100.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
46000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR RELATIVE HUMIDITIES

AT SELECTED LEVELS (IN PER CENT)

JALLEN SITE (JAL.)

PERIOD OF RECORD 1962-1967

SUMMER

RELATIVE HUMIDITY (PER CENT)

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	RELATIVE HUMIDITY (PER CENT)									
		<10	≥10	<20	≥20	<30	≥30	<40	≥40	<50	≥50
6000.	435.	0.	6.	10.	19.	29.	22.	11.	2.	1.	0.
8000.	435.	0.	4.	9.	16.	29.	25.	11.	4.	1.	1.
10000.	435.	0.	3.	9.	13.	26.	25.	15.	6.	1.	1.
12000.	435.	0.	3.	6.	13.	21.	26.	14.	10.	4.	2.
14000.	434.	0.	4.	6.	11.	19.	27.	16.	10.	3.	4.
16000.	431.	0.	5.	6.	9.	16.	23.	19.	10.	6.	4.
18000.	428.	0.	8.	9.	12.	14.	17.	17.	11.	4.	7.
20000.	425.	1.	10.	13.	17.	20.	12.	10.	8.	5.	5.
22000.	422.	1.	12.	19.	25.	16.	11.	7.	4.	2.	3.
24000.	422.	1.	14.	24.	27.	16.	9.	5.	2.	1.	1.
26000.	417.	1.	12.	27.	29.	16.	10.	2.	2.	1.	1.
28000.	409.	2.	11.	29.	30.	16.	7.	2.	1.	1.	0.
30000.	399.	2.	9.	30.	36.	14.	4.	2.	2.	0.	0.
32000.	382.	3.	11.	26.	41.	11.	3.	3.	1.	0.	0.
34000.	358.	10.	17.	27.	32.	11.	3.	1.	0.	0.	0.
36000.	266.	21.	30.	32.	12.	5.	0.	0.	0.	0.	0.
38000.	170.	38.	46.	14.	2.	0.	0.	0.	0.	0.	0.
40000.	82.	70.	29.	1.	0.	0.	0.	0.	0.	0.	0.
42000.	20.	90.	10.	0.	0.	0.	0.	0.	0.	0.	0.
44000.	3.	100.	0.	0.	0.	0.	0.	0.	0.	0.	0.
46000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR RELATIVE HUMIDITIES

AT SELECTED LEVELS (IN PER CENT)

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

FALL

RELATIVE HUMIDITY (PER CENT)

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	RELATIVE HUMIDITY (PER CENT)									
		<10	≥10 <20	≥20 <30	≥30 <40	≥40 <50	≥50 <60	≥60 <70	≥70 <80	≥80 <90	≥90 <100
6000.	426.	0.	1.	10.	39.	22.	15.	8.	2.	2.	2.
8000.	427.	0.	2.	12.	32.	20.	17.	8.	4.	2.	3.
10000.	425.	0.	4.	14.	29.	17.	15.	8.	6.	3.	3.
12000.	423.	1.	9.	19.	22.	16.	14.	7.	5.	3.	4.
14000.	416.	2.	11.	25.	21.	13.	11.	9.	4.	2.	3.
16000.	408.	3.	11.	32.	20.	11.	10.	5.	4.	1.	3.
18000.	401.	2.	13.	26.	23.	11.	6.	3.	3.	1.	2.
20000.	396.	1.	12.	42.	23.	9.	5.	3.	3.	3.	1.
22000.	395.	2.	12.	39.	27.	8.	5.	3.	3.	2.	1.
24000.	394.	2.	10.	39.	29.	8.	4.	2.	4.	1.	2.
26000.	393.	2.	9.	37.	32.	8.	5.	2.	3.	1.	1.
28000.	383.	1.	8.	38.	31.	8.	7.	4.	2.	1.	0.
30000.	370.	2.	11.	36.	32.	9.	6.	3.	2.	1.	0.
32000.	331.	12.	23.	27.	23.	10.	3.	2.	1.	0.	0.
34000.	237.	29.	30.	21.	12.	6.	0.	1.	1.	0.	0.
36000.	115.	45.	29.	19.	3.	3.	0.	0.	0.	0.	0.
38000.	43.	60.	29.	10.	0.	0.	0.	0.	0.	0.	0.
40000.	17.	82.	18.	0.	0.	0.	0.	0.	0.	0.	0.
42000.	4.	75.	25.	0.	0.	0.	0.	0.	0.	0.	0.
44000.	2.	100.	0.	0.	0.	0.	0.	0.	0.	0.	0.
46000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
48000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

SECTION VI

UPPER AIR INDEX OF REFRACTION DATA

A. By Months

1. Mean and Extreme Upper Air Indexes of
Refraction at Selected Levels ----- 196

B. By Seasons

1. Mean and Extreme Upper Air Indexes of
Refraction at Selected Levels ----- 208

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

JANUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
6000.	116.	1.000258	1.000242	0.	1.000235
8000.	115.	1.000242	1.000225	-0.000017	1.000213
10000.	117.	1.000223	1.000209	-0.000016	1.000198
12000.	116.	1.000203	1.000194	-0.000015	1.000186
14000.	116.	1.000188	1.000181	-0.000014	1.000175
15000.	115.	1.000181	1.000175	-0.000006	1.000169
16000.	115.	1.000175	1.000169	-0.000006	1.000164
18000.	116.	1.000165	1.000157	-0.000011	1.000153
20000.	115.	1.000152	1.000147	-0.000010	1.000144
25000.	115.	1.000126	1.000124	-0.000023	1.000122
30000.	110.	1.000106	1.000104	-0.000020	1.000098
35000.	103.	1.000089	1.000085	-0.000019	1.000078
40000.	102.	1.000073	1.000068	-0.000017	1.000062
45000.	95.	1.000059	1.000054	-0.000014	1.000050
50000.	84.	1.000046	1.000043	-0.000011	1.000040
55000.	69.	1.000036	1.000034	-0.000009	1.000032
60000.	56.	1.000028	1.000026	-0.000008	1.000025
65000.	50.	1.000021	1.000020	-0.000006	1.000020
70000.	44.	1.000017	1.000016	-0.000004	1.000015
75000.	38.	1.000013	1.000012	-0.000004	1.000012
80000.	37.	1.000010	1.000009	-0.000003	1.000009
85000.	35.	1.000008	1.000007	-0.000002	1.000007
90000.	31.	1.000006	1.000006	-0.000002	1.000005
95000.	23.	1.000005	1.000005	-0.000001	1.000004
100000.	15.	1.000004	1.000004	-0.000001	1.000003

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

FEBRUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
6000.	112.	1.000265	1.000241	0.	1.000232
8000.	112.	1.000243	1.000225	-0.000016	1.000218
10000.	112.	1.000221	1.000210	-0.000016	1.000202
12000.	112.	1.000205	1.000195	-0.000015	1.000188
14000.	112.	1.000188	1.000181	-0.000014	1.000175
15000.	111.	1.000183	1.000174	-0.000006	1.000170
16000.	112.	1.000178	1.000169	-0.000006	1.000164
18000.	111.	1.000163	1.000157	-0.000011	1.000154
20000.	111.	1.000151	1.000147	-0.000010	1.000145
25000.	107.	1.000126	1.000124	-0.000023	1.000121
30000.	105.	1.000106	1.000104	-0.000020	1.000099
35000.	100.	1.000089	1.000086	-0.000018	1.000078
40000.	93.	1.000073	1.000068	-0.000018	1.000062
45000.	90.	1.000058	1.000054	-0.000014	1.000050
50000.	74.	1.000047	1.000043	-0.000011	1.000040
55000.	64.	1.000037	1.000034	-0.000009	1.000032
60000.	57.	1.000029	1.000026	-0.000008	1.000023
65000.	55.	1.000022	1.000020	-0.000006	1.000019
70000.	54.	1.000017	1.000016	-0.000005	1.000015
75000.	50.	1.000013	1.000012	-0.000004	1.000012
80000.	47.	1.000010	1.000009	-0.000003	1.000009
85000.	44.	1.000008	1.000007	-0.000002	1.000007
90000.	39.	1.000006	1.000006	-0.000001	1.000005
95000.	30.	1.000005	1.000005	-0.000001	1.000004
100000.	24.	1.000004	1.000004	-0.000001	1.000003

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MARCH			GRADIENT	MINIMUM
		MAXIMUM	MEAN			
6000.	161.	1.000262	1.000240	0.	0.000016	1.000229
8000.	161.	1.000245	1.000224	-0.000016	-0.000016	1.000216
10000.	160.	1.000225	1.000209	-0.000015	-0.000015	1.000203
12000.	159.	1.000202	1.000195	-0.000015	-0.000015	1.000189
14000.	159.	1.000188	1.000181	-0.000014	-0.000014	1.000177
15000.	156.	1.000181	1.000175	-0.000006	-0.000006	1.000171
16000.	160.	1.000175	1.000169	-0.000006	-0.000006	1.000165
18000.	159.	1.000164	1.000157	-0.000012	-0.000012	1.000155
20000.	156.	1.000151	1.000147	-0.000010	-0.000010	1.000144
25000.	152.	1.000126	1.000124	-0.000023	-0.000023	1.000121
30000.	153.	1.000106	1.000104	-0.000020	-0.000020	1.000099
35000.	147.	1.000089	1.000086	-0.000018	-0.000018	1.000078
40000.	145.	1.000073	1.000069	-0.000017	-0.000017	1.000062
45000.	132.	1.000059	1.000054	-0.000015	-0.000015	1.000051
50000.	129.	1.000046	1.000043	-0.000011	-0.000011	1.000040
55000.	112.	1.000036	1.000034	-0.000010	-0.000010	1.000032
60000.	102.	1.000028	1.000026	-0.000007	-0.000007	1.000025
65000.	88.	1.000021	1.000020	-0.000006	-0.000006	1.000020
70000.	85.	1.000017	1.000016	-0.000005	-0.000005	1.000015
75000.	69.	1.000013	1.000012	-0.000003	-0.000003	1.000012
80000.	58.	1.000010	1.000009	-0.000003	-0.000003	1.000009
85000.	48.	1.000008	1.000007	-0.000002	-0.000002	1.000007
90000.	44.	1.000006	1.000006	-0.000002	-0.000002	1.000005
95000.	40.	1.000005	1.000005	-0.000001	-0.000001	1.000004
100000.	30.	1.000004	1.000004	-0.000001	-0.000001	1.000003

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
 AT SELECTED LEVELS BY MONTHS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

APRIL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
6000.	139.	1.000262	1.000240	0.	1.000227
8000.	137.	1.000242	1.000224	-0.000016	1.000212
10000.	137.	1.000232	1.000209	-0.000015	1.000198
12000.	137.	1.000212	1.000193	-0.000014	1.000187
14000.	137.	1.000194	1.000181	-0.000014	1.000174
15000.	136.	1.000189	1.000174	-0.000006	1.000168
16000.	136.	1.000182	1.000169	-0.000006	1.000163
18000.	137.	1.000165	1.000157	-0.000012	1.000153
20000.	137.	1.000153	1.000147	-0.000010	1.000144
25000.	136.	1.000127	1.000124	-0.000023	1.000121
30000.	135.	1.000106	1.000104	-0.000020	1.000101
35000.	130.	1.000089	1.000087	-0.000017	1.000083
40000.	122.	1.000074	1.000070	-0.000016	1.000065
45000.	115.	1.000059	1.000055	-0.000015	1.000052
50000.	110.	1.000047	1.000044	-0.000011	1.000041
55000.	103.	1.000036	1.000034	-0.000010	1.000032
60000.	93.	1.000028	1.000027	-0.000008	1.000026
65000.	84.	1.000022	1.000021	-0.000006	1.000020
70000.	82.	1.000017	1.000016	-0.000005	1.000015
75000.	78.	1.000013	1.000012	-0.000003	1.000012
80000.	75.	1.000010	1.000009	-0.000003	1.000009
85000.	70.	1.000008	1.000008	-0.000002	1.000007
90000.	64.	1.000006	1.000006	-0.000002	1.000005
95000.	57.	1.000005	1.000005	-0.000001	1.000004
100000.	41.	1.000004	1.000004	-0.000001	1.000003

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

MAY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
6000.	127.	1.000279	1.000244	0.	1.000214
8000.	126.	1.000255	1.000228	-0.000017	1.000204
10000.	126.	1.000232	1.000212	-0.000016	1.000193
12000.	125.	1.000216	1.000197	-0.000015	1.000186
14000.	125.	1.000202	1.000184	-0.000014	1.000171
15000.	122.	1.000193	1.000177	-0.000006	1.000166
16000.	122.	1.000185	1.000171	-0.000006	1.000161
18000.	120.	1.000171	1.000159	-0.000012	1.000152
20000.	121.	1.000157	1.000148	-0.000011	1.000143
25000.	119.	1.000127	1.000124	-0.000024	1.000122
30000.	121.	1.000106	1.000104	-0.000020	1.000101
35000.	114.	1.000089	1.000087	-0.000017	1.000082
40000.	115.	1.000074	1.000071	-0.000015	1.000066
45000.	103.	1.000061	1.000057	-0.000015	1.000054
50000.	100.	1.000047	1.000045	-0.000012	1.000043
55000.	98.	1.000037	1.000035	-0.000010	1.000033
60000.	94.	1.000029	1.000027	-0.000008	1.000026
65000.	91.	1.000022	1.000021	-0.000006	1.000020
70000.	90.	1.000017	1.000016	-0.000005	1.000016
75000.	81.	1.000013	1.000012	-0.000003	1.000012
80000.	78.	1.000010	1.000009	-0.000003	1.000009
85000.	73.	1.000008	1.000007	-0.000002	1.000007
90000.	71.	1.000006	1.000006	-0.000002	1.000005
95000.	63.	1.000005	1.000005	-0.000001	1.000004
100000.	50.	1.000004	1.000004	-0.000001	1.000003

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

JUNE

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
6000.	128.	1.000286	1.000251	0.	1.000225
8000.	126.	1.000266	1.000233	-0.000018	1.000208
10000.	126.	1.000242	1.000216	-0.000017	1.000193
12000.	126.	1.000223	1.000200	-0.000015	1.000183
14000.	125.	1.000206	1.000186	-0.000014	1.000174
15000.	122.	1.000195	1.000179	-0.000007	1.000170
16000.	124.	1.000187	1.000173	-0.000007	1.000164
18000.	123.	1.000171	1.000160	-0.000013	1.000151
20000.	123.	1.000157	1.000148	-0.000012	1.000141
25000.	122.	1.000127	1.000124	-0.000024	1.000119
30000.	118.	1.000106	1.000104	-0.000019	1.000101
35000.	111.	1.000088	1.000087	-0.000017	1.000084
40000.	114.	1.000074	1.000072	-0.000015	1.000067
45000.	110.	1.000061	1.000058	-0.000014	1.000056
50000.	104.	1.000050	1.000047	-0.000012	1.000044
55000.	98.	1.000039	1.000036	-0.000010	1.000035
60000.	96.	1.000029	1.000028	-0.000008	1.000027
65000.	94.	1.000022	1.000021	-0.000006	1.000021
70000.	91.	1.000017	1.000016	-0.000005	1.000016
75000.	88.	1.000013	1.000013	-0.000004	1.000012
80000.	78.	1.000010	1.000010	-0.000003	1.000009
85000.	73.	1.000008	1.000008	-0.000002	1.000007
90000.	65.	1.000006	1.000006	-0.000002	1.000006
95000.	58.	1.000005	1.000005	-0.000001	1.000004
100000.	51.	1.000004	1.000004	-0.000001	1.000003

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

JULY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
6000.	149.	1.000287	1.000268	0.	1.000244
8000.	147.	1.000266	1.000248	-0.000020	1.000233
10000.	150.	1.000245	1.000229	-0.000019	1.000215
12000.	150.	1.000225	1.000211	-0.000017	1.000190
14000.	150.	1.000210	1.000195	-0.000017	1.000175
15000.	141.	1.000201	1.000187	-0.000008	1.000172
16000.	149.	1.000190	1.000180	-0.000008	1.000166
18000.	146.	1.000175	1.000165	-0.000014	1.000155
20000.	146.	1.000160	1.000152	-0.000013	1.000144
25000.	139.	1.000129	1.000124	-0.000028	1.000122
30000.	145.	1.000106	1.000104	-0.000021	1.000102
35000.	132.	1.000038	1.000087	-0.000017	1.000086
40000.	137.	1.000074	1.000073	-0.000014	1.000072
45000.	121.	1.000062	1.000060	-0.000013	1.000059
50000.	117.	1.000050	1.000048	-0.000011	1.000047
55000.	103.	1.000040	1.000037	-0.000011	1.000036
60000.	101.	1.000030	1.000028	-0.000009	1.000028
65000.	89.	1.000022	1.000022	-0.000007	1.000021
70000.	89.	1.000017	1.000016	-0.000005	1.000016
75000.	79.	1.000013	1.000013	-0.000004	1.000012
80000.	81.	1.000011	1.000010	-0.000003	1.000010
85000.	70.	1.000008	1.000008	-0.000002	1.000007
90000.	69.	1.000007	1.000006	-0.000002	1.000006
95000.	57.	1.000005	1.000005	-0.000001	1.000004
100000.	57.	1.000004	1.000004	-0.000001	1.000003

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

AUGUST

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
6000.	157.	1.000289	1.000268	0.	1.000234
8000.	157.	1.000266	1.000248	-0.000021	1.000220
10000.	157.	1.000247	1.000228	-0.000019	1.000210
12000.	157.	1.000228	1.000211	-0.000018	1.000195
14000.	157.	1.000211	1.000194	-0.000017	1.000175
15000.	151.	1.000200	1.000186	-0.000007	1.000171
16000.	156.	1.000191	1.000179	-0.000008	1.000166
18000.	156.	1.000175	1.000165	-0.000014	1.000155
20000.	156.	1.000161	1.000151	-0.000013	1.000144
25000.	149.	1.000129	1.000124	-0.000027	1.000121
30000.	152.	1.000106	1.000104	-0.000020	1.000102
35000.	144.	1.000089	1.000087	-0.000017	1.000086
40000.	145.	1.000074	1.000072	-0.000015	1.000072
45000.	134.	1.000061	1.000059	-0.000013	1.000058
50000.	132.	1.000050	1.000048	-0.000011	1.000046
55000.	119.	1.000040	1.000037	-0.000011	1.000036
60000.	110.	1.000030	1.000028	-0.000009	1.000027
65000.	96.	1.000022	1.000022	-0.000006	1.000021
70000.	93.	1.000017	1.000016	-0.000005	1.000016
75000.	85.	1.000013	1.000013	-0.000004	1.000012
80000.	80.	1.000011	1.000010	-0.000003	1.000010
85000.	69.	1.000008	1.000008	-0.000002	1.000007
90000.	63.	1.000007	1.000006	-0.000002	1.000006
95000.	60.	1.000005	1.000005	-0.000001	1.000004
100000.	55.	1.000004	1.000004	-0.000001	1.000003

MINIMUM

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
JALLER SETE (JAL)
PERIOD OF RECORD 1962-1967

SEPTEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
6000.	121.	1.000290	1.000265	0.	1.000234
8000.	123.	1.000269	1.000245	-0.000020	1.000224
10000.	123.	1.000246	1.000225	-0.000019	1.000210
12000.	121.	1.000225	1.000207	-0.000018	1.000188
14000.	121.	1.000205	1.000190	-0.000017	1.000176
15000.	117.	1.000196	1.000182	-0.000008	1.000168
16000.	121.	1.000188	1.000175	-0.000007	1.000161
18000.	120.	1.000173	1.000161	-0.000015	1.000150
20000.	122.	1.000158	1.000148	-0.000012	1.000141
25000.	116.	1.000129	1.000124	-0.000023	1.000121
30000.	120.	1.000106	1.000104	-0.000020	1.000101
35000.	115.	1.000089	1.000087	-0.000017	1.000083
40000.	114.	1.000074	1.000072	-0.000015	1.000067
45000.	106.	1.000061	1.000059	-0.000013	1.000055
50000.	104.	1.000050	1.000048	-0.000011	1.000044
55000.	91.	1.000038	1.000037	-0.000011	1.000027
60000.	82.	1.000029	1.000028	-0.000009	1.000020
65000.	76.	1.000022	1.000022	-0.000006	1.000020
70000.	73.	1.000017	1.000016	-0.000005	1.000016
75000.	72.	1.000013	1.000013	-0.000004	1.000012
80000.	71.	1.000010	1.000010	-0.000003	1.000009
85000.	69.	1.000008	1.000008	-0.000002	1.000007
90000.	65.	1.000006	1.000006	-0.000002	1.000006
95000.	62.	1.000005	1.000005	-0.000001	1.000004
100000.	55.	1.000004	1.000004	-0.000001	1.000003

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

OCTOBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
6000.	143.	1.000264	1.000250	0.	1.000234
8000.	144.	1.000262	1.000233	-0.000018	1.000219
10000.	145.	1.000241	1.000216	-0.000017	1.000201
12000.	145.	1.000222	1.000198	-0.000017	1.000185
14000.	142.	1.000201	1.000182	-0.000016	1.000172
15000.	139.	1.000158	1.000175	-0.000007	1.000165
16000.	142.	1.000180	1.000169	-0.000007	1.000160
18000.	141.	1.000165	1.000157	-0.000012	1.000151
20000.	141.	1.000153	1.000147	-0.000010	1.000142
25000.	137.	1.000128	1.000124	-0.000023	1.000120
30000.	137.	1.000106	1.000104	-0.000019	1.000101
35000.	133.	1.000089	1.000087	-0.000017	1.000083
40000.	132.	1.000074	1.000071	-0.000016	1.000068
45000.	117.	1.000060	1.000057	-0.000014	1.000056
50000.	108.	1.000048	1.000046	-0.000011	1.000044
55000.	94.	1.000038	1.000036	-0.000010	1.000034
60000.	89.	1.000029	1.000027	-0.000008	1.000026
65000.	82.	1.000022	1.000021	-0.000006	1.000020
70000.	80.	1.000017	1.000016	-0.000005	1.000016
75000.	75.	1.000013	1.000012	-0.000004	1.000012
80000.	71.	1.000010	1.000009	-0.000003	1.000009
85000.	57.	1.000008	1.000007	-0.000002	1.000007
90000.	53.	1.000006	1.000006	-0.000002	1.000006
95000.	46.	1.000005	1.000005	-0.000001	1.000004
100000.	33.	1.000004	1.000004	-0.000001	1.000003

W141WCH

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

NOVEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
6000.	159.	1.000277	1.000247	0.	1.000236
8000.	160.	1.000253	1.000229	-0.000018	1.000217
10000.	159.	1.000236	1.000212	-0.000017	1.000201
12000.	159.	1.000217	1.000196	-0.000016	1.000186
14000.	160.	1.000200	1.000182	-0.000014	1.000173
15000.	157.	1.000192	1.000175	-0.000006	1.000167
16000.	157.	1.000184	1.000169	-0.000006	1.000163
18000.	157.	1.000167	1.000157	-0.000012	1.000153
20000.	158.	1.000156	1.000147	-0.000013	1.000144
25000.	156.	1.000127	1.000124	-0.000023	1.000120
30000.	154.	1.000106	1.000104	-0.000020	1.000100
35000.	138.	1.000088	1.000087	-0.000017	1.000080
40000.	126.	1.000074	1.000071	-0.000015	1.000065
45000.	111.	1.000061	1.000057	-0.000014	1.000053
50000.	101.	1.000049	1.000045	-0.000012	1.000041
55000.	86.	1.000038	1.000035	-0.000010	1.000033
60000.	78.	1.000029	1.000027	-0.000008	1.000026
65000.	74.	1.000022	1.000021	-0.000006	1.000020
70000.	62.	1.000017	1.000016	-0.000005	1.000015
75000.	54.	1.000013	1.000012	-0.000004	1.000012
80000.	50.	1.000010	1.000010	-0.000003	1.000009
85000.	44.	1.000008	1.000008	-0.000002	1.000007
90000.	41.	1.000006	1.000006	-0.000002	1.000005
95000.	41.	1.000005	1.000005	-0.000001	1.000004
100000.	34.	1.000004	1.000004	-0.000001	1.000003

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

DECEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
6000.	147.	1.000268	1.000247	0.	1.000235
8000.	148.	1.000250	1.000229	-0.000019	1.000218
10000.	149.	1.000230	1.000211	-0.000017	1.000201
12000.	149.	1.000213	1.000195	-0.000016	1.000185
14000.	149.	1.000195	1.000181	-0.000014	1.000174
15000.	149.	1.000187	1.000174	-0.000007	1.000169
16000.	148.	1.000177	1.000168	-0.000006	1.000164
18000.	147.	1.000166	1.000157	-0.000012	1.000153
20000.	146.	1.000154	1.000147	-0.000010	1.000142
25000.	138.	1.000127	1.000124	-0.000023	1.000120
30000.	134.	1.000106	1.000104	-0.000020	1.000100
35000.	126.	1.000088	1.000086	-0.000018	1.000081
40000.	119.	1.000073	1.000070	-0.000016	1.000066
45000.	106.	1.000059	1.000055	-0.000014	1.000053
50000.	92.	1.000047	1.000044	-0.000011	1.000042
55000.	81.	1.000036	1.000034	-0.000010	1.000033
60000.	73.	1.000028	1.000027	-0.000008	1.000026
65000.	65.	1.000021	1.000021	-0.000006	1.000020
70000.	63.	1.000017	1.000016	-0.000005	1.000015
75000.	61.	1.000013	1.000012	-0.000003	1.000012
80000.	57.	1.000010	1.000010	-0.000003	1.000009
85000.	53.	1.000008	1.000008	-0.000002	1.000007
90000.	52.	1.000006	1.000006	-0.000002	1.000005
95000.	42.	1.000005	1.000005	-0.000001	1.000004
100000.	37.	1.000004	1.000004	-0.000001	1.000003

MINIMUM

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
 AT SELECTED LEVELS BY SEASONS
 JALLEN SITE (JAL)
 PERIOD OF RECORD 1962-1967

WINTER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
6000.	375.	1.000268	1.000244	0.	1.000232
8000.	375.	1.000250	1.000227	-0.000017	1.000213
10000.	378.	1.000230	1.000210	-0.000017	1.000198
12000.	377.	1.000213	1.000195	-0.000015	1.000185
14000.	377.	1.000195	1.000181	-0.000014	1.000174
15000.	375.	1.000187	1.000174	-0.000006	1.000169
16000.	375.	1.000178	1.000169	-0.000006	1.000164
18000.	374.	1.000166	1.000157	-0.000011	1.000153
20000.	372.	1.000154	1.000147	-0.000010	1.000142
25000.	360.	1.000127	1.000124	-0.000023	1.000120
30000.	349.	1.000106	1.000104	-0.000020	1.000098
35000.	329.	1.000089	1.000086	-0.000018	1.000078
40000.	314.	1.000073	1.000069	-0.000017	1.000062
45000.	291.	1.000059	1.000054	-0.000014	1.000050
50000.	250.	1.000047	1.000043	-0.000011	1.000040
55000.	214.	1.000037	1.000034	-0.000009	1.000032
60000.	186.	1.000029	1.000026	-0.000008	1.000025
65000.	170.	1.000022	1.000020	-0.000006	1.000019
70000.	161.	1.000017	1.000016	-0.000005	1.000015
75000.	149.	1.000013	1.000012	-0.000004	1.000012
80000.	141.	1.000010	1.000009	-0.000003	1.000009
85000.	132.	1.000008	1.000007	-0.000002	1.000007
90000.	122.	1.000006	1.000006	-0.000002	1.000005
95000.	95.	1.000005	1.000005	-0.000001	1.000004
100000.	76.	1.000004	1.000004	-0.000001	1.000003

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY SEASONS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

SPRING

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
6000.	427.	1.000279	1.000241	0.	1.000214
8000.	424.	1.000255	1.000225	-0.000016	1.000204
10000.	423.	1.000232	1.000210	-0.000015	1.000193
12000.	421.	1.000216	1.000195	-0.000015	1.000186
14000.	421.	1.000202	1.000182	-0.000014	1.000171
15000.	414.	1.000193	1.000175	-0.000006	1.000166
16000.	418.	1.000185	1.000169	-0.000006	1.000161
18000.	416.	1.000171	1.000158	-0.000012	1.000152
20000.	414.	1.000157	1.000147	-0.000010	1.000143
25000.	407.	1.000127	1.000124	-0.000023	1.000121
30000.	409.	1.000106	1.000104	-0.000023	1.000099
35000.	391.	1.000089	1.000086	-0.000018	1.000078
40000.	382.	1.000074	1.000070	-0.000016	1.000062
45000.	350.	1.000061	1.000055	-0.000015	1.000051
50000.	339.	1.000047	1.000044	-0.000011	1.000040
55000.	313.	1.000037	1.000034	-0.000010	1.000032
60000.	289.	1.000029	1.000027	-0.000008	1.000025
65000.	263.	1.000022	1.000021	-0.000006	1.000020
70000.	257.	1.000017	1.000016	-0.000005	1.000015
75000.	228.	1.000013	1.000012	-0.000003	1.000012
80000.	211.	1.000010	1.000009	-0.000003	1.000009
85000.	191.	1.000008	1.000007	-0.000002	1.000007
90000.	179.	1.000006	1.000006	-0.000002	1.000005
95000.	160.	1.000005	1.000005	-0.000001	1.000004
100000.	121.	1.000004	1.000004	-0.000001	1.000003

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY SEASONS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

SUMMER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
6000.	434.	1.000289	1.000263	0.	1.000225
8000.	430.	1.000266	1.000243	-0.000020	1.000208
10000.	433.	1.000247	1.000225	-0.000019	1.000193
12000.	433.	1.000228	1.000208	-0.000017	1.000183
14000.	432.	1.000211	1.000192	-0.000016	1.000174
15000.	414.	1.000201	1.000185	-0.000007	1.000170
16000.	429.	1.000191	1.000177	-0.000007	1.000164
18000.	425.	1.000175	1.000163	-0.000014	1.000151
20000.	425.	1.000161	1.000150	-0.000013	1.000141
25000.	410.	1.000129	1.000124	-0.000026	1.000119
30000.	415.	1.000106	1.000104	-0.000020	1.000101
35000.	387.	1.000089	1.000087	-0.000017	1.000084
40000.	396.	1.000074	1.000072	-0.000015	1.000067
45000.	365.	1.000067	1.000059	-0.000013	1.000056
50000.	353.	1.000057	1.000048	-0.000011	1.000044
55000.	320.	1.000040	1.000037	-0.000011	1.000035
60000.	307.	1.000030	1.000028	-0.000009	1.000027
65000.	279.	1.000022	1.000022	-0.000006	1.000021
70000.	273.	1.000017	1.000016	-0.000005	1.000016
75000.	252.	1.000013	1.000013	-0.000004	1.000012
80000.	239.	1.000011	1.000010	-0.000003	1.000009
85000.	212.	1.000008	1.000008	-0.000002	1.000007
90000.	197.	1.000007	1.000006	-0.000002	1.000006
95000.	175.	1.000005	1.000005	-0.000001	1.000004
100000.	165.	1.000004	1.000004	-0.000001	1.000003

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY SEASONS
JALLEN SITE (JAL)
PERIOD OF RECORD 1962-1967

FALL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
6000.	423.	1.000290	1.000253	0.	1.000234
8000.	427.	1.000269	1.000235	-0.000018	1.000217
10000.	427.	1.000245	1.000217	-0.000018	1.000201
12000.	425.	1.000225	1.000200	-0.000017	1.000185
14000.	423.	1.000205	1.000184	-0.000016	1.000172
15000.	413.	1.000196	1.000177	-0.000007	1.000165
16000.	420.	1.000188	1.000171	-0.000007	1.000160
18000.	418.	1.000173	1.000158	-0.000013	1.000150
20000.	421.	1.000158	1.000147	-0.000011	1.000141
25000.	409.	1.000129	1.000124	-0.000024	1.000120
30000.	411.	1.000106	1.000104	-0.000020	1.000100
35000.	386.	1.000089	1.000087	-0.000017	1.000080
40000.	372.	1.000074	1.000071	-0.000015	1.000065
45000.	334.	1.000061	1.000058	-0.000014	1.000053
50000.	313.	1.000050	1.000046	-0.000011	1.000041
55000.	271.	1.000038	1.000036	-0.000010	1.000033
60000.	249.	1.000029	1.000028	-0.000008	1.000026
65000.	232.	1.000022	1.000021	-0.000006	1.000020
70000.	215.	1.000017	1.000016	-0.000005	1.000015
75000.	201.	1.000013	1.000013	-0.000004	1.000012
80000.	192.	1.000010	1.000010	-0.000003	1.000009
85000.	170.	1.000008	1.000008	-0.000002	1.000007
90000.	159.	1.000006	1.000006	-0.000002	1.000005
95000.	149.	1.000005	1.000005	-0.000001	1.000004
100000.	122.	1.000004	1.000004	-0.000001	1.000003

FREEZING LEVEL

For this report the freezing level is defined as any altitude at which the temperature is 0° centigrade. Multiple freezing levels may occur on a single rawinsonde observation. Section VII presents data based on all freezing level occurrences.

SECTION VII

UPPER AIR FREEZING LEVEL DATA

A. By Months And By Seasons

1. Mean and Extreme Heights (Feet MSL) of the
Freezing Level ----- 218
2. Relative Frequency Distribution of the
Freezing Level (In Per Cent)----- 214

MEAN AND EXTREME HEIGHTS (FEET MSL) OF THE FREEZING LEVEL BY MONTHS AND BY SEASONS

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

MONTH	TOTAL RAWINSONDE ASCENSIONS	MAXIMUM	MEAN	MINIMUM
JANUARY	119	13700	8300	4100
FEBRUARY	113	13500	8400	4100
MARCH	162	14200	9900	4200
APRIL	142	15100	11500	7300
MAY	129	16400	13200	7700
JUNE	128	16700	14900	11300
JULY	150	17600	15900	13600
AUGUST	161	17200	15500	13300
SEPTEMBER	123	17000	14600	10300
OCTOBER	145	16500	13400	7100
NOVEMBER	165	15600	11800	4200
DECEMBER	149	14800	9500	4100

SEASON			
WINTER	381	14800	8800
SPRING	433	16400	11400
SUMMER	439	17600	15500
FALL	433	17000	13100

RELATIVE FREQUENCY DISTRIBUTION OF THE FREEZING LEVEL BY MONTHS AND BY SEASONS (IN PERCENT)

JALLEN SITE (JAL)

PERIOD OF RECORD 1962-1967

GEOMETRIC ALTITUDE MSL FEET

MONTH	TOTAL RAWINSONDE ASCENSIONS	GEOMETRIC ALTITUDE MSL FEET															
		≥ 4K < 5K	≥ 5K < 6K	≥ 6K < 7K	≥ 7K < 8K	≥ 8K < 9K	≥ 9K < 10K	≥ 10K < 11K	≥ 11K < 12K	≥ 12K < 13K	≥ 13K < 14K	≥ 14K < 15K	≥ 15K < 16K	≥ 16K < 17K	≥ 17K < 18K	≥ 18K < 19K	≥ 19K
JANUARY	119	16	9	11	12	5	11	13	11	9	2	0	0	0	0	0	0
FEBRUARY	113	11	7	16	9	15	11	16	9	5	2	0	0	0	0	0	0
MARCH	162	5	4	5	7	10	15	13	20	14	4	2	0	0	0	0	0
APRIL	142	0	0	0	1	6	6	22	24	20	15	4	1	0	0	0	0
MAY	129	0	0	0	2	0	4	5	9	12	37	26	1	0	0	0	0
JUNE	128	0	0	0	0	0	0	0	2	1	13	37	0	0	0	0	0
JULY	150	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0
AUGUST	161	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0
SEPTEMBER	123	0	0	0	0	0	0	2	0	2	19	39	0	0	0	0	0
OCTOBER	145	0	0	0	1	0	2	1	10	23	23	21	0	0	0	0	0
NOVEMBER	165	1	2	2	3	5	7	11	21	27	21	7	5	0	0	0	0
DECEMBER	149	8	4	8	7	11	16	12	13	12	4	4	0	0	0	0	0

SEASON	WINTER	SPRING	SUMMER	FALL
301	11	7	11	9
433	12	2	6	10
439	0	0	0	0
433	0	0	2	0

FIGURE I

MAP OF RADIOSONDE SITES

AT

WHITE SANDS MISSILE RANGE ----- 215



FIGURE I

TABLE I

FREQUENCY DISTRIBUTION OF
UPPER AIR SOUNDINGS BY HOUR -----216

FREQUENCY DISTRIBUTION OF UPPER AIR SOUNDINGS BY HOURS AND MONTHS
 PERIOD OF RECORD 1962-1967
 JALLEN SITE (JAL)

HOURL (MST)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL BY HOURS
1	1	1	2	0	1	0	2	3	4	0	0	1	15
2	1	0	0	0	3	1	3	4	4	1	0	0	17
3	0	0	2	2	1	3	7	10	2	5	3	3	38
4	0	1	5	3	2	6	4	3	3	5	1	0	33
5	1	1	2	4	4	4	3	3	0	2	3	7	34
6	2	0	2	5	9	3	10	12	7	5	1	1	57
7	3	8	7	7	7	4	7	11	7	4	7	4	76
8	6	7	18	11	6	12	9	10	10	21	15	10	135
9	6	13	13	21	18	13	16	22	9	14	20	20	185
10	17	12	20	17	11	19	15	6	13	9	11	15	165
11	9	10	19	12	10	9	17	13	6	10	18	14	147
12	13	15	13	11	6	7	15	10	9	11	10	13	133
13	17	6	9	14	11	13	12	15	14	11	10	4	136
14	11	9	14	9	16	9	9	7	11	21	26	14	156
15	11	15	13	10	14	6	4	8	4	7	10	16	118
16	10	6	5	8	1	3	3	4	6	7	12	12	77
17	0	0	8	3	1	3	3	2	3	0	1	3	27
18	2	2	3	0	1	2	0	1	2	3	5	3	24
19	2	0	1	2	2	3	1	1	1	0	3	1	17
20	3	3	2	1	1	3	3	3	0	3	2	3	27
21	0	1	0	1	0	1	1	4	5	3	2	3	23
22	2	2	1	0	1	2	1	3	1	1	2	0	16
23	1	0	1	1	3	2	3	3	2	1	1	0	18
24	1	1	2	0	0	0	0	3	0	1	2	0	10
TOTAL BY MONTHS	119	113	162	142	129	128	150	161	123	145	165	147	

TOTAL
BY MONTHS

1684 UPPER AIR SOUNDINGS WERE TAKEN DURING THIS PERIOD

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